

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP)
OFFICE OF AIR QUALITY**

**Heartland Aluminum
125 South Nancy
Warren, Indiana 46792**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F069-14274-00060	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 21, 2001 Expiration Date: August 21, 2006

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a secondary metals reclamation operation.

Authorized individual:	Michael Haggerty
Source Address:	125 South Nancy, Warren, Indiana 46792
Mailing Address:	P.O. Box 150 Warren, Indiana 46792
SIC Code:	5093
Source Location Status:	Huntington
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) aluminum sweat furnace identified as AS-1000 with a maximum capacity of 0.50 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 2.0 million (MM) British thermal units (Btu) per hour total; a secondary molten metal holding chamber utilizing a natural gas fired burner rated at 1.0 MMBtu per hour; and a 0.4 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-01.
- (b) One (1) aluminum sweat furnace identified as AS-990 with a maximum capacity of 1.25 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 5.0 million (MM) British thermal units (BTU) per hour total, and a 1.0 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-02.

A.3 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.4 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits and shall supersede existing Minor Source Operating Permit (069-10650-00060), issued on June 19, 1999.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain an Preventive Maintenance Plan (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
 - (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
 - (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
 - (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
 - (g) Operations may continue during an emergency only if the following conditions are met:

- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit;
and

- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8, the PM₁₀ potential to emit shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.
- (b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.
- (c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

In addition, the owner or operator shall, for any change or modification which may increase the source emissions of any other criteria pollutant to greater than or equal to 100 tons/yr, any single HAP to greater than or equal to 10 tons/yr, and/or combined HAPs to greater than or equal 25 tons/yr, submit a Title V application to the Office of Air Quality for approval before such change may occur.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment is/are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 State General Performance Testing Requirements [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ no later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

C.10 40 CFR 63, Subpart RRR General Performance Testing Requirements [63.1511]

The owner or operator shall comply with the following testing requirements:

- (a) Prior to conducting the performance tests required in Conditions D.1.22, D.1.23, and D.1.25, the owner or operator shall prepare and submit notification of intent to conduct a performance test and a site-specific test plan meeting the requirements of 40 CFR 63.7(c). Said test protocol shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

at least sixty (60) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) Following approval of the site-specific test plan, the owner or operator shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source emission unit as follows, and report the results in the notification of compliance status report described in Condition D.1.34(b).
- (1) The owner or operator shall conduct each performance test according to the requirements of the general provisions of Subpart A of Part 63 and this Subpart.
 - (2) The owner or operator shall conduct each test while the respective sweat furnace is operating at the highest production level with charge materials representative of the range of materials processed by the unit, and if applicable, at the highest reactive fluxing rate.
 - (3) Each performance test for a batch process shall consist of three (3) separate runs, with pollutant sampling for each run being conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of three (3) hours.
 - (4) Each performance test for a batch process shall consist of three (3) separate runs, with the pollutant sampling for each run being conducted over the entire process operating cycle.
 - (5) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run shall be conducted for a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.
 - (6) Initial compliance with an applicable emission limit or standard shall be considered demonstrated if the average of the required three (3) runs conducted during the performance test is less than or equal to the applicable emission limit or standard.
- (c) The owner or operator shall use the following test methods found in 40 CFR 60, Appendix A, as applicable, to determine compliance with the applicable emission limits or standards:

- (1) Method 1 for sample and velocity traverses,
- (2) Method 2 for velocity and volumetric flow rate,
- (3) Method 3 for gas analysis,
- (4) Method 4 for moisture content of gas,
- (5) Method 5 for concentration of PM,
- (6) Method 9 for visible emission observations,
- (7) Method 23 for the concentration of dioxins/furans,
- (8) Method 25A for the concentration of THC, and
- (9) Method 26A for the concentration of HCl.

The owner or operator may use an alternative test methods in lieu of the test methods specified in this Condition provided that said test method(s) is/are approved by the Office of Air Quality.

- (d) The owner or operator shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 63.1510, that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator shall use the appropriate procedures in this Condition and submit the information in the notification of compliance status report as specified in Condition D.1.34(b).
- (e) The owner or operator may use existing data in addition to the test results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Office of Air Quality:
 - (1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.
 - (2) The same test methods and procedures as required by this Subpart were used in the test.
 - (3) The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.
 - (4) All process and control equipment operating parameters required to be monitored were monitored as required in this Subpart and documented in the test report.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within 180 days from the date on which this source commences operation).

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.

- (4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee’s failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

**C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does/do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

- (a) One (1) aluminum sweat furnace identified as AS-1000 with a maximum capacity of 0.50 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 2.0 million (MM) British thermal units (Btu) per hour total; a secondary molten metal holding chamber utilizing a natural gas fired burner rated at 1.0 MMBtu per hour; and a 0.4 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-01.
- (b) One (1) aluminum sweat furnace identified as AS-990 with a maximum capacity of 1.25 tons of scrap metal processed per hour. The furnace is equipped with a primary metal melting chamber utilizing a natural gas fired burner rated at 5.0 million (MM) British thermal units (BTU) per hour total, and a 1.0 MMBtu per hour natural gas fired thermal afterburner utilized for particulate matter and volatile organic compound control exhausting at one (1) stack identified as EP-02.

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 326 IAC 2-7-10.5, WITH CONDITIONS LISTED BELOW.

General Construction Conditions

D.1.1 General Construction Condition

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

Effective Date of the Permit

D.1.2 Effective Date of Permit

Pursuant to IC 13-15-5-3, this section of this permit becomes effective upon its issuance.

D.1.3 Construction Condition Applicability

All requirements of these construction conditions shall remain in effect unless modified in a manner consistent with procedures established for modifications pursuant to 326 IAC 2.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.4 General Provisions Relating to HAPs [326 IAC 20-1-1] [40 CFR Part 63, Subpart A)]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the sweat furnaces AS-990 and AS-1000, except as otherwise specified in 40 CFR 63, Subpart RRR.

D.1.5 Particulate Matter (PM) Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from sweat furnaces AS-990 and AS-1000 shall not exceed 4.76 and 2.58 pounds per hour, respectively.

D.1.6 Sweat Furnace Dioxin/Furan Emission Limitations [63.1505(f)]

The owner or operator shall not discharge or cause to be discharged to the atmosphere, dioxin/furan emissions from sweat furnaces AS-990 or AS-1000, in excess of 3.5×10^{-10} gr/dscf TEQ at eleven percent (11%) oxygen (O_2).

D.1.7 Group 1 Furnace Individual Dioxin/Furan Content Limitations [63.1505(i)]

The owner or operator shall not allow the dioxin/furan content of the feed/charge processed at sweat furnaces AS-990 or AS-1000 to exceed 2.1 E-4 grains TEQ (3.0 E-8 pound) per ton of feed/charge (or ton of aluminum produced).

D.1.8 Secondary Aluminum Processing Unit (SAPU) Dioxin/Furan Content Limitations [63.1505(k)]

The owner or operator shall, on and after the date of approval of the operation, maintenance, and monitoring (OM&M) plan, limit the combined 3-day, 24-hour rolling average dioxin/furan emissions from sweat furnaces AS-990 and AS-1000 to 3.0 E-8 pound dioxin/furan TEQ per ton of feed/charge (or ton aluminum production weight).

Compliance with the SAPU limit of this Condition may be demonstrated by demonstrating that compliance with the individual group 1 dioxin/furan limitations of Condition D.1.7 is demonstrated.

D.1.9 Sweat Furnace Operation [63.1506(a)]

The owner or operator shall operate sweat furnaces AS-990 and AS-1000 and their associated control equipment according to the requirements of Subpart RRR and this permit upon startup.

D.1.10 Afterburners [63.1506(h)]

The owner or operator shall design, install, operate and maintain afterburners at sweat furnaces AS-990 and AS-1000. Said afterburners shall be maintained such that the operating temperature of each afterburner is at or above 1600 degrees Fahrenheit ($^{\circ}F$), and the minimum design residence time is no less than two seconds.

Satisfying the requirements of this Condition shall be considered sufficient to demonstrate compliance with the sweat furnace dioxin/furan emission limits of Condition D.1.6. Thus, no compliance tests for the dioxin/furan limits of Condition D.1.6 shall be required.

D.1.11 Capture/Collection Systems [63.1510(d)] [63.1506(c)]

The owner or operator shall design, install, operate, and maintain at sweat furnaces AS-990 and AS-1000, a system for the capture and collection of particulate matter, PM10, and dioxin/furan emissions. Said capture/collection systems shall:

- (a) meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice";
- (b) vent captured emissions through a closed system; and
- (c) be maintained such that each capture/control system operates at the parameter levels established in the required stack tests of Conditions D.1.21 and D.1.22 that achieve compliance with the PM limits of Condition D.1.5 and dioxin/furan limits of Conditions D.1.6, D.1.7, and D.1.8.

D.1.12 Monitoring Devices [63.1510(g)]

The owner or operator shall install an afterburner temperature monitoring device at the exit of each afterburner's combustion zone. Said temperature monitoring devices shall have a recorder response range including zero and 1.5 times the average temperature established according to the requirements in 63.1512(m), and shall be:

- (a) designed, installed, and calibrated according to the manufacturer's specifications; and
- (b) maintained according to the manufacturer's instructions for short and long term maintenance, with each monitoring device operating parameter value or range being the value or range established during the performance evaluation required in Condition D.1.26.

The owner or operator shall also meet all other applicable continuous monitoring system requirements of 40 CFR 63, Subpart A.

D.1.13 Feed/Charge Requirements [63.1506(d)], [63.1510(e)]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, either:

- (a) install, calibrate, operate, and maintain a device that measures and records or otherwise determines, the total weight of feed/charge to, or if applicable, the total aluminum production weight from, sweat furnaces AS-990 and AS-1000 for each operating cycle or time period used in the performance test, with the feed/charge or aluminum production from within the SAPU being measured or recorded on an emission unit by emission unit basis. In addition, the owner or operator shall:
 - (1) achieve a minimum weight measurement device or procedure accuracy of ± 1 percent of the weight being measured. If the required accuracy cannot be achieved as a result of equipment layout or charging practices, the owner or operator may apply to the Office of Air Quality for approval to use a device of alternative accuracy. Said device of alternative accuracy shall not be approved unless the owner or operator provides assurance through data and information that the affected unit will meet the relevant standard;
 - (2) verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six months; and
 - (3) follow the weight measurement system or other weight determination procedures specified in the OM&M plan.

As an alternative to measuring and recording the metal weight based on feed/charge basis, the owner or operator may measure and record the aluminum production weight from sweat furnaces AS-990 and AS-1000 provided that:

- (A) the aluminum production weight, rather than the feed/charge weight is measured for all emission units within the SAPU, and
- (B) all calculations to demonstrate compliance with the emission limits for the SAPU are based on aluminum production weight rather than feed/charge weight.

or

- (b) use an alternative procedure to determine the total weight of feed/charge or aluminum production from sweat furnaces AS-990 and AS-1000. The owner or operator shall only implement an alternative procedure if the alternative procedure has been deemed acceptable by the Office of Air Quality.

D.1.14 Labeling [63.1506(b)]

The owner or operator shall provide and maintain easily visible labels that shall be posted at sweat furnaces AS-990 and AS-1000. Said labels shall identify the applicable emission limits and means of compliance, including:

- (a) the type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and
- (b) the applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.

D.1.15 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

D.1.16 Operation, Maintenance, and Monitoring (OM&M) Plan [63.1510(b)]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, prepare and implement a written operation, maintenance, and monitoring (OM&M) plan.

Said OM&M plan shall be implemented at startup, but need only be submitted to the Office of Air Quality (OAQ) for review and approval as part of the Part 70 or Part 71 permit application required to be submitted by December 9, 2005. Said OM&M shall include, at a minimum, the following requirements:

- (a) for each process and control device, the operating parameters to be monitored to determine compliance, and any applicable established operating levels or ranges;
- (b) a monitoring schedule for each sweat furnace;
- (c) a list of the procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limit of Condition D.1.6;
- (d) a list of the procedures for the proper operation and maintenance of the monitoring devices or systems used to determine compliance, including:
 - (1) the procedures for calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (2) the procedures for the quality control and quality assurance of the required continuous emission monitoring system as required by the general provisions in 40 CFR 63, Subpart A;
- (e) a list of the procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners;

- (f) a list of the corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph (a) of this Condition, including:
 - (1) the procedures to determine and record the cause of a deviation or excursion, and the time the deviation or excursion began and ended; and
 - (2) the procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed; and
- (g) a maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

All subsequent proposed changes to the plan shall be submitted to the Office of Air Quality (OAQ) for review and approval, and shall include, at a minimum, the most recent updated information requested in (a) through (g) of this condition. Pending approval by the OAQ of an initial or amended plan, the owner or operator shall comply with the provisions of the most recent existing approved plan.

D.1.17 Corrective Action for 40 CFR 63, Subpart RRR [63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action.

The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

Compliance Determination Requirements

D.1.18 Afterburners [63.1506(h)(2)]

The owner or operator shall operate the afterburners of sweat furnaces AS-990 and AS-1000 at all times the respective sweat furnaces are in operation, in accordance with the OM&M plan.

D.1.19 Capture/Collection Systems [63.1506(c)]

The owner or operator shall operate the capture/control systems at all times the respective sweat furnaces are in operation, according to the procedures and requirements in the OM&M plan.

D.1.20 Monitoring Devices

The owner or operator shall operate the monitoring devices at all times the respective sweat furnaces are in operation, according to the procedures and requirements in the OM&M plan.

D.1.21 PM/PM10 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 60 and 180 days after issuance of this permit, in order to demonstrate compliance with Conditions C.1 and D.1.5, the owner or operator shall perform PM and PM-10 testing utilizing methods as approved by the Office of Air Quality. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. Testing shall be conducted in accordance with Section C- Performance Testing.

D.1.22 Dioxin/Furan Testing Requirements [63.1512(j)]

The owner or operator shall perform dioxin/furan testing for sweat furnaces AS-990 and AS-1000 to determine the dioxin/furan emission rates in pounds dioxin/furan TEQ per ton from each emission unit.

Should the results of each performance test demonstrate that sweat furnaces AS-990 and AS-1000 are in compliance with the individual group 1 furnace limitations of Condition D.1.7, the owner or operator may use said results to demonstrate compliance with the SAPU limit of Condition D.1.8 in lieu of the demonstrating compliance through the requirements of Conditions D.1.31(a).

If the results of each performance test does not demonstrate that sweat furnaces AS-990 and AS-1000 are in compliance with the group 1 furnace limitations of Condition D.1.7, the owner or operator shall comply with the monitoring requirements of Condition D.1.31(a) and use the results from the most recent acceptable performance tests to calculate the required SAPU 3-day, 24-hour dioxin/furan emission rates.

D.1.23 Feed/Charge (or Aluminum Production Weight) Requirements [63.1512(k)]

During the performance tests required in Condition D.1.22, the owner or operator shall, for sweat furnaces AS-990 and AS-1000, measure (or otherwise determine) and record the total weight of feed/charge (or aluminum production weight), for each of the three required test runs, and calculate and record the total weight.

D.1.24 Equations for Determining Compliance [63.1513(b), (d), and (e)]

To demonstrate compliance with the limits of Conditions D.1.6, D.1.7, and D.1.8, the owner or operator shall use the following:

(a) for conversion of gr/dscf or lb/ton to gr TEQ/dscf or lb TEQ/ton, respectively, the owner or operator shall use the procedures and equation in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB-145756.

(b) for conversion of gr/dscf to lb/ton:

$$E = \frac{C * Q}{P * 7000}$$

where: E = dioxin/furan emission rate (lb/ton feed or aluminum produced)
C = dioxin/furan concentration (gr/dscf)
Q = volumetric flow rate of exhaust gases (dscf/hr)
P = production rate (ton/hr)

(c) to determine compliance with the SAPU limit of Condition D.1.8, the owner or operator shall either:

- (1) the owner or operator shall compute the mass weighted dioxin/furan emissions for the SAPU using the following equation:

$$E_{cD/F} = \frac{\sum [E_{tiD/F} * T_{ti}]}{\sum [T_{ti}]}$$

where: $E_{cD/F}$ = the mass weighted dioxin/furan emissions for the SAPU
 $E_{tiD/F}$ = measured dioxin/furan emissions
 T_{ti} = the average feed rate for individual emission unit during the operating cycle or performance test period

Compliance with the SAPU limit of Condition D.1.8 shall be considered achieved if the estimated mass weighted dioxin/furan emissions for the SAPU is less than or equal to the SAPU limit of Condition D.1.8.

or

- (2) as an alternative to using equation of part (c)(1) of this Condition, the owner or operator may demonstrate compliance for the SAPU by demonstrating that sweat furnace AS-990 and AS-1000 is in compliance with the individual group 1 emission limits of Condition D.1.7.

D.1.25 Compliance Determination for the Secondary Aluminum Processing Unit (SAPU) [63.1510(t) and (u)]

The owner or operator shall either:

- (a) demonstrate compliance with the SAPU limit of Condition D.1.8 by calculating the 3 day, 24 hour rolling average dioxin/furan emissions for each SAPU (sweat furnaces AS-990 and AS-1000 combined) on a daily basis. Should the owner or operator choose to demonstrate compliance by calculating the 3-day, 24-hour rolling average, said average shall be calculated as follows:

- (1) The owner or operator shall first calculate the total weight of material charged to each emission unit in the SAPU (T_i) for each 24 hour day using the feed/charge weight information required in Condition D.1.13.

If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit rather than weight of material charged to the emission unit, all performance test emissions results and all calculations shall be calculated on the aluminum production weight basis.

- (2) The owner or operator shall then determine the total emissions from the SAPU by multiplying the total feed charge weight or the weight of aluminum produced, whichever is applicable, for each emission unit (T_i) for the 24-hour period, by the emission rate (E_{ri}) in lb/ton of feed/charge or lb/ton of aluminum produced, whichever is applicable, for that emission unit (as determined during the most recent performance test) to provide the dioxin/furan emissions for each emission unit for the 24-hour period, in pounds.

- (3) Upon determination of the of the total emissions, the owner or operator shall divide the total emissions for the SAPU for the 24-hour period by the total material charged to the SAPU or the weight of the aluminum produced by the SAPU over the 24-hour period, whichever is applicable, to provide the daily emission rate for the SAPU.

The equation for the calculations described in (a)(1) through (a)(3) of this Condition is listed below:

$$E_{\text{day}} = \frac{\sum [T_i * E_{ri}]}{\sum [T_i]}$$

where: E_{day} = the daily dioxin/furan emissions for the SAPU (sweat furnaces AS-990 plus AS-1000) for the 24 hour period (pounds dioxin/furan)
 T_i = the total amount of feed, or aluminum produced, whichever is applicable ,for the 24-hour period, from each individual furnace (tons)
 E_{ri} = the measured emission rate of each individual furnace as determined in the performance test (lb dioxin,furan/ton)

Upon determination of the total dioxin/furan emissions from the SAPU (AS-990 and AS-1000 combined (E_{day}), the owner or operator shall calculate the 3-day, 24-hour rolling average dioxin/furan emissions in pounds of dioxin/furan by summing the daily dioxin/furan emission rates over the most recent consecutive days and dividing by 3.

or

- (b) as an alternative to the requirements of part (a) of this Condition, provide a copy of the documentation required in Condition D.1.31(b), that demonstrates that each individual emission unit (sweat furnace AS-990 and sweat furnace AS-1000) is in compliance with the dioxin/furan emission limits of Condition D.1.8.

D.1.26 Performance Evaluation [63.1512(m)] [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

The owner or operator shall conduct a performance evaluation of each temperature monitoring device to establish an operating parameter value or range for the required afterburner temperature of 1600 °F.

Said performance evaluations shall be conducted according to the requirements of 40 CFR 63, Section 63.8 and Section C- Performance Testing, and shall be performed after issuance of this permit, with the test results submitted as part of the Notification of Compliance Status Report within 60 days, as specified in Condition D.1.35(b). The tests shall be conducted utilizing the specified methods of Subpart RRR and/or alternative methods as approved by the Office of Air Quality.

These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.27 Afterburners [63.1510(g)(3)]

The owner or operator shall, for the afterburners of sweat furnaces AS-990 and AS-1000, conduct an inspection of each afterburner at least once a year and record the results, with each inspection including, at a minimum:

- (a) inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;
- (b) inspection for proper adjustment of combustion air;
- (c) inspection of internal structures (e.g., baffles) to ensure structural integrity;
- (d) inspection of dampers, fans, and blowers for proper operation;
- (e) inspection for proper sealing;
- (f) inspection of motors for proper operation;
- (g) inspection of combustion chamber refractory lining and clean and replace lining as necessary;
- (h) inspection of afterburner shell for corrosion and/or hot spots;
- (i) documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made; and
- (j) verification that the equipment is maintained in good operating condition.

Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan.

D.1.28 Capture/Collection System [63.1510(d)(2)] [63.1512(s)]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in Condition D.1.19 and record the results of each inspection.

In addition, to document compliance with the requirements of this Condition, the owner or operator shall, for sweat furnaces AS-990 and AS-1000, submit the information described in Condition D.1.35(b)(5) as part of the notification of compliance status report.

D.1.29 Monitoring Devices [63.1510(g)]

The owner or operator shall:

- (a) continuously monitor and record the operating afterburner temperature of each respective afterburner. The recorder response range shall include zero and 1.5 times the required 1600 °F temperature, and the reference method shall be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Office of Air Quality; and
- (b) inspect the monitoring devices, once every 6 months, calibrating each afterburner monitoring device, as necessary, according to the manufacturer's specifications.

D.1.30 Site Specific Requirements for the Secondary Aluminum Processing Unit (SAPU) [63.1510(s)]

The owner or operator shall, for the secondary aluminum processing unit (sweat furnaces AS-990 and AS-1000), include the operation maintenance and monitoring (OM&M) plan, the following information:

- (a) the identification of each emission unit in the secondary aluminum processing unit,
- (b) the specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit (SAPU) and the date of its installation or application,

- (c) the emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit,
- (d) information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operation standards of this Subpart, and
- (e) the monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and, if applicable, the monitoring procedures for daily calculation of the 3 day, 24 hour rolling average using the procedures specified in Condition D.1.31(a). If the owner or operator utilizes the performance test alternative specified in Condition D.1.31(b), the owner or operator shall include in the OM&M plan, the agreed upon alternate monitoring procedures.

The SAPU compliance procedures within the operation maintenance and monitoring (OM&M) plan shall not include any averaging among emissions of differing pollutants, the inclusion of any affected units other than emission units in a SAPU, the inclusion of any emission unit while it is shut down, or the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator shall submit a request to the Office of Air Quality. Said request shall contain the information required in (a) through (e) of this Condition. The owner or operator shall obtain approval from the Office of Air Quality before implementing any revisions.

D.1.31 Secondary Aluminum Processing Unit (SAPU) Monitoring Requirements [63.1510(t) and (u)]

The owner or operator shall either:

- (a) record the 3-day, 24-hour rolling average dioxin/furan emissions calculated in Condition D.1.25(a),

or

- (b) as an alternative to the requirements of part (a) of this Condition, keep readily available results of the most recent acceptable compliance stack tests (as required in Condition D.1.22) that demonstrate that sweat furnace AS-990 and sweat furnace AS-1000, each, are in compliance with the individual dioxin/furan emission limits of Condition D.1.8.

D.1.32 Labeling [63.1510(c)] [63.1512(r)]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, inspect the labels required in Condition D.1.14 at least once per calendar month to confirm that the posted labels are intact and legible.

In addition, to document compliance with the requirements of this Condition, the owner or operator shall submit the information described in Condition D.1.35(b)(3) as part of the notification of compliance status report.

D.1.33 Visible Emissions Notations

- (a) Daily visible emission notations of sweat furnaces AS-990 and AS-1000 stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.34 Alternate Monitoring Methods [63.1510(w)]

- (a) The owner or operator may, for sweat furnaces AS-990 and AS-1000, submit to the United States (U.S.) Environmental Protection Agency (EPA), Region V, an application for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of Subpart RRR, provided the owner or operator:
 - (1) continues to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure,
 - (2) submits an application for approval of alternate monitoring methods with said application containing:
 - (A) data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach,
 - (B) a description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and
 - (C) data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s); and
 - (3) submits all required supporting information in a timely manner to the U.S. EPA, Region V, to allow sufficient consideration of the application. Neither submittal of an application nor the U.S. EPA, Region V's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of Subpart RRR.
- (b) Upon receipt of the alternative monitoring plan application, the U.S. EPA, Region V, shall review the alternate monitoring application as follows:
 - (1) No averaging periods other than those specified in Section 63.1510 shall be approved.
 - (2) The alternate monitoring application shall only be approved if it is determined that the alternate monitoring plan provides equivalent or better assurance of compliance with the relevant emission standard(s).

Before disapproving any alternate monitoring application, the U.S. EPA, Region V, shall provide notice of:

- (A) the information and findings upon which the intended disapproval is based; and
- (B) an opportunity for the owner or operator to present additional supporting information before final action is taken on the application. Said notice shall specify how much additional time is allowed for the owner or operator to provide additional supporting information.

The U.S. EPA, Region V, reserves the authority to, at any time on a case-by-case basis, require additional or alternative operating limits, or alternative approaches to establishing operating limits, as deemed necessary to ensure that compliance with the emission standards of this subpart is demonstrated.

Notification, Record Keeping, and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

Notification Requirements

D.1.35 Notifications [63.1515]

The owner or operator shall submit the following notifications:

(a) Initial Notifications:

The owner or operator shall submit initial notifications to the Office of Air Quality as follows:

- (1) As required by 63.9(b)(1), the owner or operator shall notify the Office of Air Quality of any existing minor source that is modified such that it becomes a major source subject to Subpart RRR.
- (2) As required by 63.9(b)(3), the owner or operator shall notify the Office of Air Quality of any new minor affected source, reconstructed affected source, or source that has been reconstructed such that it becomes an affected source. Said notification shall include a statement that the source is subject to Subpart RRR.
- (3) As required by 63.9(b)(4), the owner or operator shall, for any new major affected source or reconstructed major affected source, provide the following notifications:
 - (A) notification of intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;
 - (B) notification of the date when construction or reconstruction was commenced, no later than 30 days after the date construction or reconstruction commenced;
 - (C) notification of the anticipated date of startup; and
 - (D) notification of the actual date of startup.
- (4) As required by 63.9(b)(5), any owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, shall provide notification of the intended construction or reconstruction. Said notification shall include all the information required for an application for approval of construction or reconstruction, as required by 63.5(d).

For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

Said application shall be submitted as follows:

- (A) the application shall be submitted as soon as practicable before the construction or reconstruction is planned to commence, but no sooner than the effective date of Subpart RRR, or
- (B) the application shall be submitted as soon as practicable before startup but no later than 90 days after the effective date of this subpart if the construction or reconstruction had commenced and initial startup had not occurred before the effective date.
- (5) As required by 63.9(d), the owner or operator shall provide notification of any special compliance obligations for a new source.
- (6) As required by 63.9(e) and (f), the owner or operator shall, if required, provide notification to the Office of Air Quality, of the anticipated date for conducting performance tests and visible emission observations. Notification of the intent to conduct a performance test shall be submitted at least 60 days before the performance test is scheduled. Notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.
- (7) As required by 63.9(g), the owner or operator shall provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) Notification of Compliance Status Report:

The owner or operator shall submit a notification of compliance status report to the Office of Air Quality and US EPA, Region V within 60 days of startup. Said notification of compliance status report shall include the information specified in this Condition, and shall be signed by the responsible official who shall certify its accuracy.

The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination.

For the notification of compliance status report to be deemed complete, the owner or operator shall submit, at a minimum, the following information:

- (1) all information required in Sec. 63.9(h).
- (2) the approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
- (3) unit labeling as described in Condition D.1.14, including process type or furnace classification and operating requirements.

- (4) the compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.
- (5) design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in Condition D.1.19.
- (6) manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 °F for the afterburners of sweat furnaces AS-990 and AS-1000.
- (7) approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).
- (8) startup, shutdown, and malfunction plan, with revisions.

Record Keeping Requirements

D.1.36 Record Keeping for 40 CFR 63, Subpart RRR [63.1517]

The owner or operator shall keep records as follows:

- (a) As required by Sec. 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.

- (1) The owner or operator shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records shall be retained at the facility. The remaining 3 years of records may be retained off site.
- (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

Should any general record keeping requirement(s) of this condition conflict with any general record keeping requirements of Condition C.20, the owner or operator shall comply with the more stringent applicable requirement(s).

- (b) In addition to the general records required by Sec. 63.10(b), the owner or operator of a new or existing affected source shall maintain records of:

- (1) For sweat furnace AS-990 and AS-1000 afterburners:
 - (A) Records of the afterburner operating temperature, including any period when the temperature falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and
 - (B) Records of annual afterburner inspections.
- (2) For each continuous monitoring system, records required by Sec. 63.10(c).
- (3) Records of all feed/charge (or throughput) weights of sweat furnaces AS-990 and AS-1000, for each operating cycle or time period used in the performance test.
- (4) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.
- (5) Records of annual inspections of emission capture/collection and closed vent systems.

- (6) Records for any approved alternative monitoring or test procedure.
- (7) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (A) Startup, shutdown, and malfunction plan;
 - (B) For major sources, OM&M plan; and
 - (C) Site-specific secondary aluminum processing unit emission plan (if applicable).
- (8) For the secondary aluminum processing unit (sweat furnaces AS-990 and AS-1000), records of the combined total feed/charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, the total aluminum produced for each 24-hour period and, if applicable, calculations of the 3-day 24-hour rolling average emissions.

D.1.37 Particulate Matter (PM) and PM10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.33, the owner or operator shall maintain records of daily visible emission notations of the AS-990 stack exhaust.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Reporting Requirements

D.1.38 Reporting Requirements for 40 CFR 63, Subpart RRR [63.1516]

The owner or operator shall submit the following reports:

- (a) Startup, Shutdown, and Malfunction Plan/Reports:

The owner or operator shall develop and implement a written plan as described in Sec. 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard.

The owner or operator shall also keep records of each event as required by Sec. 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in Sec. 63.6(e)(3).

In addition to the information required in Sec. 63.6(e)(3), the plan shall include:

- (1) procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
- (2) corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(b) Excess Emissions/Summary Report:

As required by Sec. 63.10(e)(3), the owner or operator shall submit semiannual reports within 60 days after the end of each 6-month period. Each report shall contain the information specified in Sec. 63.10(c). When no deviations of parameters have occurred, the owner or operator shall submit a report stating that no excess emissions occurred during the reporting period.

- (1) A report shall be submitted if any of these conditions occur during a 6-month reporting period:
 - (A) an excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
 - (B) an action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in Sec. 63.6(e)(3).
 - (C) any period of time when sweat furnace AS-990 or AS-1000 was not operated according to the requirements of 40 CFR 63, Subpart RRR.
- (2) Each report shall include a statement that ``Only clean charge materials were processed in sweat furnaces AS-990 and AS-1000" during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period."
- (3) The owner or operator shall submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(c) Annual Compliance Certifications:

For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the owner or operator shall certify continuing compliance based upon, but not limited to, the following conditions:

- (1) Any period of excess emissions, as defined in (b)(1) of this Condition, that occurred during the year were reported as required by this subpart; and
- (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Heartland Aluminum
Source Address: 125 South Nancy, Warren, Indiana 46792
Mailing Address: P.O. Box 150, Warren, Indiana 46792
FESOP No.: 069-14274-00060

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Heartland Aluminum
Source Address: 125 South Nancy, Warren, Indiana 46792
Mailing Address: P. O. Box 150, Warren, Indiana 46792
FESOP No.: 069-14274-00060

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Heartland Aluminum
Source Address: 125 South Nancy, Warren, Indiana 46792
Mailing Address: P. O. Box 150, Warren, Indiana 46792
FESOP No.: 069-14274-00060

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management

Office of Air Quality

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Heartland Aluminum
Source Location: 125 S Nancy, Warren, Indiana 46792
County: Huntington
SIC Code: 5093
Operation Permit No.: F 069-14274-00060
Permit Reviewer: SDF

On July 2, 2001, the Office of Air Quality (OAQ) had a notice published stating that Heartland Aluminum had applied for a modification to their existing secondary metals reclamation operation to allow the addition of a new aluminum sweat furnace. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 13, 2001, Whitmore Associates, for Heartland Aluminum, submitted comments on the proposed permit. The summary of the comments and corresponding responses is as follows:

Comment 1:

Page 28, Condition D.1.7. Furnace AS-1000 is an existing furnace under Subpart RRR and therefore should not be subject to the Subpart RRR requirements until March 24, 2003.

Response 1:

Pursuant to 40 CFR 63, Subpart RRR, Section 63.1501(a), existing furnace AS-1000 is not required to achieve compliance with the requirements of Subpart RRR until March 24, 2003.

Subpart RRR also allows the Office of Air Quality the authority to defer the Subpart RRR requirement to submit a Title V permit application until December 9, 2005, provided that the affected units are not located at a major source under 40 CFR 63.2 (single and combined HAP emissions greater than 10 and 25 tons/yr, respectively) and the source is not otherwise required to obtain a Title V permit.

Heartland Aluminum has opted to accept a FESOP that limits the source's potential to emit of air pollutants to less than Title V permit applicability levels, which in turn, defers the Subpart RRR requirement to submit a Title V application until December 9, 2005. Having discussed the compliance options with Heartland Aluminum, it has been determined and agreed upon, that the existing sweat furnace shall be in compliance with Subpart RRR at startup to avoid additional permitting requirements associated with incorporating Subpart RRR into their FESOP two years post issuance. Heartland Aluminum is required to submit a Title V application by December 9, 2005.

Thus, no changes to the permit shall be made.

Comment 2:

Page 28, Condition D.1.8. Subpart RRR currently requires a retention time of 2 seconds at 1600 F. The US EPA has announced that the retention time will be changed to 0.8 seconds at 1600 F. However, EPA has not yet made this official. We request that the condition be written with the 0.8 second retention time.

Response 2:

Pursuant to "New Regulations Controlling Emissions From Secondary Aluminum Production (Sweat Furnace Operations)", issued November, 2000, 40 CFR 63, Subpart RRR is being amended to reduce the residence time for sweat furnaces from 2 seconds to 0.8 seconds. However, the new "proposed" 0.8 seconds referenced by the EPA document is less stringent than the current residence time of 2.0 seconds.

The Office of Air Quality cannot incorporate into a permit, any limit or requirement that is less stringent than an established federal standard, even if the new proposed standard or requirement has been proposed by EPA.

Thus, the proposed 0.8 second residence time will not be incorporated into the permit at this time. However, the 0.8 second residence time may be incorporated into the permit on or after the date the standard becomes effective.

Comment 3:

Page 28, Condition D.1.9(c). We request that this requirement be deleted. We provided an estimate of 97% particulate reduction based on an input loading of 13.5 lb PM/hr. Heartland will be burning natural gas fuel and using aluminum that is much cleaner than traditional sweat furnace aluminum. Due to the expected low particulate input level, a 97% removal may not be achieved. The particulate emission limits of Condition D.1.5 and the opacity will be met.

Response 3:

Condition D.1.5 requires the source to achieve hourly PM rates of 4.76 and 2.58 pounds per hour for sweat furnaces AS-990 and AS-1000, respectively. Compliance with these limits can be determined through the compliance stack tests required in Condition D.1.21. To demonstrate compliance, the source need only operate and maintain the control units at the parameters established during the tests that achieve compliance with the hourly PM limits of Condition D.1.5.

Therefore, Condition D.1.9(c) (Now Condition D.1.11(c)) shall be amended as follows:

D.1.11 Capture/Collection Systems [63.1510(d)] [63.1506(c)]

The owner or operator shall design, install, operate, and maintain at sweat furnaces AS-990 and AS-1000, a system for the capture and collection of particulate matter, PM10, and dioxin/furan emissions. Said capture/collection systems shall:

- (a) meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice";
- (b) vent captured emissions through a closed system; and
- (c) be maintained such that each capture/control system **operates at the parameter levels established in the required stack tests of Conditions D.1.21 and D.1.22 that achieve an overall control efficiency of 97% for particulate matter compliance with the PM limits of Condition D.1.5 and dioxin/furan limits of Conditions D.1.6, D.1.7, and D.1.8.**

Comment 4:

Page 28, Condition D.1.11. We are concerned about the requirement to use only clean charge as feed stock. The feed stock that Heartland currently uses and expects to continue to use, is aluminum wheels.

This feed stock is clean relative to the feed stock used at most sweat furnaces. It is unclear whether the wheels processed at Heartland Aluminum fit the definition of "clean" charge.

Response 4:

Based on the following determination from the definitions of 40 CFR 63, Subpart RRR, sweat furnaces AS-990 and AS-1000 are defined as group 1 furnaces which combined are also defined as a secondary aluminum processing unit.

Pursuant to 40 CFR 63, Subpart RRR, Section 1503, a group 1 furnace is defined as "a furnace of any design that melts, holds, or processes aluminum that contains paint, lubricants, coatings, or other foreign materials with or without reactive fluxing, or processes clean charge with reactive fluxing."

Heartland Aluminum processes aluminum wheels which contain oil and are coated with paint. Thus, sweat furnaces AS-990 and AS-1000 are determined to be group 1 furnaces.

Pursuant to 40 CFR 63, Subpart RRR, Section 1503, a "new" secondary aluminum processing unit (SAPU) is defined as "any combination of group 1 furnaces and in-line fluxers which are simultaneously constructed after February 11, 1999. Each of the group 1 furnaces or in line fluxers within a new SAPU is considered an emission unit within that secondary aluminum processing unit."

Sweat furnace AS-1000 was constructed in June of 1999, after the applicable date of February 11, 1999. Sweat furnace AS-990 is a new proposed furnace. Both furnaces are group 1 furnaces. Thus, both furnaces combined are determined to be a "new" secondary aluminum processing unit.

Section D.1 is therefore amended as follows to include the new requirements that become applicable as a result of the status of sweat furnaces AS-990 and AS-1000 changing from group 2 furnaces to group 1 and sweat furnaces AS-990 and AS-1000 combined becoming a secondary aluminum processing unit (SAPU).

63.1500: APPLICABILITY:

Changing the status of sweat furnaces AS-990 and AS-1000 from group 2 to group 1 furnaces and defining the combination of the two as a SAPU does not change the applicability of the sweat furnaces to Subpart RRR. Thus, no changes to the permit shall be made.

63.1501: COMPLIANCE DATES:

Changing the status of sweat furnaces AS-990 and AS-1000 from group 2 furnaces to group 1 furnaces and defining the combination of the two as a SAPU does not change the Subpart RRR compliance dates of the sweat furnaces. Thus, no changes to the permit shall be made.

63.1502: INCORPORATION BY REFERENCE:

This section did not and still does not require any language be incorporated into the permit. Thus, no changes to the permit shall be made.

63.1503: DEFINITIONS:

This section did not and still does not require any language be incorporated into the permit. Thus, no changes to the permit shall be made.

63.1504: RESERVED

63.1505: EMISSION STANDARDS FOR AFFECTED SOURCES AND EMISSION UNITS:

The applicable standards under Section 63.1505 are 1505(a) (summary), 1505(f) (standards for sweat furnaces), 1505(i) (standards for group 1 furnaces), and 1505(k) (standards for secondary aluminum processing units).

(a) 1505(a) and (f): Emission Standard Summary and Standards for Sweat Furnaces:

No changes to the conditions pertaining to Paragraphs (a) and (f) of Section 63.1505 are necessary because this section pertains to all sweat furnaces. Changing the status of the furnaces from group 2 to group 1 and defining the furnaces as a SAPU will not change the language included in the permit.

(b) 1505(i): Standards for Group 1 Furnaces:

Paragraph 1505(i) becomes applicable because this Section applies to group 1 furnaces.

The applicable sweat furnaces, AS-990 and AS-1000, each are group 1 furnaces that are also area sources at a secondary aluminum production facility. Heartland aluminum is determined to be a secondary aluminum production facility because the source produces post consumer scrap as defined in Section 1503. The furnaces are not sidewell furnaces and do not conduct reactive fluxing.

(1) 1505(i):

Pursuant to Section 1505(i), the owner or operator of a group 1 furnace must use the limits of Section 1505(i) to determine the emission standards for the secondary aluminum processing unit (SAPU). Sweat furnaces AS-990 and AS-1000 combined make up the SAPU for this source.

(2) 1505(i)(1) and (2):

The PM limitations of parts (1) and (2) of Paragraph 1505(i) do not apply because these parts of the rule apply only to group 1 furnaces that are major sources.

(3) 1505(i)(4) and (5):

The HCl and opacity limits of parts (4) and (5) of Paragraph 1505(i) do not apply because these parts of the rule apply only to group 1 furnaces that are major sources.

(4) 1505(i)(7):

The requirements of part (7) of Paragraph 1505(i) do not apply because this part of the rule applies to sidewell furnaces that conduct reactive fluxing when the level of molten metal falls below the top of the passage between the sidewell when the level of molten metal falls below the top of the passage between the sidewell and the hearth.

(5) 1505(i)(3):

The dioxin/furan content limit of part (3) of Section 1505(i) applies because this part of the rule applies to group 1 furnaces at secondary aluminum processing facilities that are major "or" area sources.

(6) 1505(i)(6):

Part (6) of 1505(i) applies because this part of the rule applies to the individual standards for each furnace and the “combined” SAPU standards. This part of the rule is not incorporated into the permit because the referenced SAPU limit that this part applies to has already been determined.

Based on the above determination, the following condition has been drafted.

D.1.7 Group 1 Furnace Individual Dioxin/Furan Content Limitations [63.1505(i)]

The owner or operator shall not allow the dioxin/furan content of the feed/charge processed at sweat furnaces AS-990 or AS-1000 to exceed 2.1 E-4 grains TEQ (3.0 E-8 pound) per ton of feed/charge (or ton of aluminum produced).

(c) 1505(k): Standards for Secondary Aluminum Processing Units (SAPUs):

Paragraph 1505(k) becomes applicable because this part of the rule applies to SAPUs.

Pursuant to 40 CFR 63, Subpart RRR, Section 1505(k), the owner or operator shall, on or after the date of approval of the operation, maintenance, and monitoring (OM&M) plan, comply with the emission limits calculated using the equations under this paragraph.

(1) 1505(k)(1) and (2):

Parts (1) and (2) of Paragraph 1505(k) do not apply because there are no HCl and PM limitations under Paragraph 1505(i) that apply.

(2) 1505(k)(4):

Part (4) of Paragraph 1505(k) does not apply because this part of the rule only applies to major sources.

(3) 1505(k)(3):

Part (3) of Paragraph 1505(k) applies because there is an applicable dioxin/furan limit under Paragraph 1505(i) that applies.

(4) 1505(k)(5):

Part (5) of Paragraph 1505(k) applies because this part of the rule applies to SAPUs that are area sources.

The only applicable equation under this paragraph is Equation 3 which establishes the SAPU limit. Based on the maximum aluminum production rates of 1.25 tons per hour and 0.75 tons per hour for sweat furnaces AS-1000 and AS-990, respectively, and the dioxin/furan limit from Section 1505(i), the SAPU limit is determined as follows:

$$L_{CD/F} = \frac{\sum [L_{iD/F} * T_{ti}]}{\sum [T_{ti}]}$$

where: $L_{cDD/F}$ = the SAPU dioxin/furan limit (lb/ton)

$L_{tiD/F}$ = the individual dioxin/furan limit for sweat furnaces AS-990 and AS-1000 (2.1 E-4 gr TEQ/ ton = 3.0 E-8 lb TEQ/ton)
 T_{ti} = the feed charge rate or aluminum production weight rate for each individual sweat furnace (ton/hr)

Unit	$L_{tiD/F}$	T_{ti}	$L_{tiD/F} * T_{ti}$
AS-990	3.0 E-8	1.25	3.8 E-8
As-1000	3.0 E-8	0.50	1.5 E-8
sum		1.75	5.3 E-8

SAPU limit (lb dioxin/furan/ton)	3.0 E-8
----------------------------------	---------

Further, pursuant to Section 1505(k)(5), the owner or operator may demonstrate compliance with the SAPU limit by demonstrating compliance with the individual group one furnace limitations of 3.0 E-8 pound dioxin/furan TEQ per ton feed/charge established for each sweat furnace.

Based on the above determination, the following condition has been drafted:

D.1.8 Secondary Aluminum Processing Unit (SAPU) Dioxin/Furan Content Limitations
[63.1505(k)]

The owner or operator shall, on and after the date of approval of the operation, maintenance, and monitoring (OM&M) plan, limit the combined 3-day, 24-hour rolling average dioxin/furan emissions from sweat furnaces AS-990 and AS-1000 to 3.0 E-8 pound dioxin/furan TEQ per ton of feed/charge (or ton aluminum production weight).

Compliance with the SAPU limit of this Condition may be demonstrated by demonstrating that compliance with the individual group 1 dioxin/furan emission limits of Condition D.1.7 is demonstrated.

63.1506: OPERATING REQUIREMENTS:

The applicable requirements under Section 63.1506 are 1506(a) (summary), 1506(b) (Labeling), 1506(c) (Capture/collection Systems), 1506(d) (Feed/Charge Weight), 1506(h) (Sweat Furnaces), and 1506(p) (Corrective Actions for Affected Units). 1506(o) becomes not applicable because this part of the rule applies to group 2 furnaces. The furnaces are determined to be group 1 furnaces.

(a) 1506(a): Summary of Operating Requirements:

No changes to the condition pertaining to Paragraph (a) of Section 1506 are necessary because this part of the rule applies to both group 1 and group 2 furnaces. Changing the status of the furnaces from group 2 to group 1 will not affect the language of the proposed permit.

(b) 1506(b): Labeling Operating Requirements:

No changes to the condition pertaining to Paragraph (b) of Section 1506 are necessary because the labeling requirements are required of both group 1 and group 2 furnaces. Changing the status of the furnaces from group 2 to group 1 will not affect the language of the proposed permit.

(c) 1506(c): Operating Requirements for Capture/Collection Systems:

No changes to the condition pertaining to Paragraph (c) of Section 1506 are necessary because the capture/collection system requirements are required of the control devices of group 1 and group 2 furnaces. Changing the status of the furnaces from group 2 to group 1 will not affect the language in the proposed permit.

(d) 1506(d): Feed/Charge Weight Operating Requirements:

Paragraph (d) of Section 1506 becomes applicable because this part of the rule applies affected facilities that have a lb/ton limit. Because the sweat furnaces have been redefined as group 1 furnaces, a 3.0 E-8 lb/ton limit has been established.

Based on the above determination, the following condition is drafted. Due to the modifications of the Emission Limitations and Standards section, Condition D.1.11 has been renumbered to D.1.13

D.1.13 Feed/Charge Requirements [63.1506(d)]

The owner or operator shall, for sweat furnaces AS-990 and AS-1000:

(a) install and operate a device that measures and records or otherwise determine the weight of feed/charge (or throughput) for each operating cycle or time period used in the performance test, and

(b) operate each weight measurement system or other weight determination procedure in accordance with the OM&M plan.

As an alternative to measurement and record keeping based on the weight of feed/charge, the owner or operator may choose to measure and record the aluminum production weight from sweat furnaces AS-990 and AS-1000 provided that the aluminum production weight, rather than the feed/charge weight is measured for all emission units within the SAPU and all calculations to demonstrate compliance with the emission limits for the SAPU are based on aluminum production weight rather than feed/charge weight.

(e) 1506(h): Operating Requirements for Sweat Furnaces:

No changes to the condition pertaining to Paragraph (h) of Section 1506 are necessary because this part of the rule applies to any applicable unit with emissions controlled by an afterburner. Both sweat furnace AS-990 and AS-1000 are equipped or will be equipped with an afterburner. Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

(f) 1506(o): Operating Requirements for Group 2 Furnaces:

Condition D.1.11 shall be removed because this condition pertains to 1506(o) which is applicable to group 2 furnaces. The furnaces are determined to be group 1 furnaces.

~~D.1.11 Charge and Flux Limitations [63.1506(o)]~~

~~The owner or operator shall utilize only clean charge as the feedstock and non-reactive fluxes at sweat furnaces AS-990 and AS-1000.~~

(g) 1506(p): Corrective Action Requirements:

No changes to the condition pertaining to Paragraph (p) of Section 1506 are necessary because this part of the rule applies to sweat furnaces AS-990 and AS-1000 and their associated control devices. Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

However, upon review of the condition (the corrective action requirements of Condition D.1.26), it is determined that this condition is not a compliance monitoring requirement, but a Emission Limitations and Standards requirement. Thus, Condition D.1.26 (now Condition D.1.17) shall be moved to the Emission Limitations and Standards Section, after the OM&M plan condition.

D.1.2617 Corrective Action for 40 CFR 63, Subpart RRR [63.1506(p)]

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator shall initiate corrective action.

The corrective action taken, shall restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the corrective actions taken shall include follow-up actions necessary to return the process or control device parameter level(s) to the applicable value or range of values, and steps to prevent the likely recurrence of the cause of a deviation.

63.1507: RESERVED

63.1508: RESERVED

63.1509: RESERVED

63.1510: MONITORING REQUIREMENTS:

The applicable requirements under Section 63.1510 are 1510(a) (summary), 1510(b) (Operation Maintenance and Monitoring Plan), 1510(c) (Labeling), 1510(d) (Capture/collection Systems), 1510(e) (Feed/Charge Weight), 1510(g) (Afterburners), 1510(s) (Site Specific Requirements for SAPUs), 1510(t) (SAPUs), 1510(u) (SAPU Compliance By Individual Emission Unit Demonstration), and 1510(w) (Alternative Monitoring Methods).

(a) 1510(a): Summary of Monitoring Requirements:

No changes need to be made to the condition pertaining to Paragraph (a) of Section 1510 because this part of the rule provides the compliance date to all units under this Section. Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

(b) 1510(b): Operation, Maintenance, and Monitoring Plan:

No changes need to be made to the condition pertaining to Paragraph (b) of this section because the operation maintenance and monitoring (OM&M) plan applies to all applicable units. Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

(c) 1510(c): Labeling Monitoring Requirements:

No changes need to be made to the condition pertaining to Paragraph (c) of this Section because this part of the rule applies to both group 1 and 2 furnaces. Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

(d) 1510(d): Capture/Collection System Monitoring Requirements:

No changes need to be made to the condition pertaining to Paragraph (d) of this Section because this part of the rule applies to the control devices of the source (afterburner capture/collection system). Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

(e) 1510(e): Feed/Charge Weight Monitoring Requirements:

Paragraph (e) of Section 1510 becomes applicable because this part of the rule applies to affected facilities that have a lb/ton limit. Both sweat furnaces are limited to 3.0 E-8 lb/ton limit. The requirements of this Paragraph and Paragraph (d) of Section 1506 are essentially the same, the requirements have been combined through the following revision of Condition D.1.11 (now Condition D.1.13). Condition D.1.13 shall still be in the emission limitations and standards section.

D.1.13 Feed/Charge Requirements [63.1506(d)], **[63.1510(e)]**

The owner or operator shall, for sweat furnaces AS-990 and AS-1000, **either**:

(a) install, calibrate, and operate, and maintain a device that measures and records or otherwise determines, the **total weight of feed/charge (or throughput) to, or if applicable, the total aluminum production weight from, sweat furnaces AS-990 and AS-1000** for each operating cycle or time period used in the performance test, **and with the feed/charge or aluminum production from within the SAPU being measured or recorded on an emission unit by emission unit basis. In addition, the owner or operator shall:**

- (1) achieve a minimum weight measurement device or procedure accuracy of +- 1 percent of the weight being measured. If the required accuracy cannot be achieved as a result of equipment layout or charging practices, the owner or operator may apply to the Office of Air Quality for approval to use a device of alternative accuracy. Said device of alternative accuracy shall not be approved unless the owner or operator provides assurance through data and information that the affected unit will meet the relevant standard;**
- (2) verify the calibration of the weight measurement device in accordance with the schedule specified by the manufacturer, or if no calibration schedule is specified, at least once every six months; and**
- (3) ~~(b) operate each~~ follow the weight measurement system or other weight determination procedures in accordance with specified in the OM&M plan.**

As an alternative to measuring and recording the metal weight based on feed/charge basis, the owner or operator may measure and record the aluminum production weight from sweat furnaces AS-990 and AS-1000 provided that:

- (A) the aluminum production weight, rather than the feed/charge weight is measured for all emission units within the SAPU, and
- (B) all calculations to demonstrate compliance with the emission limits for the SAPU are based on aluminum production weight rather than feed/charge weight.

or

- (b) use an alternative procedure to determine the total weight of feed/charge or aluminum production from sweat furnaces AS-990 and AS-1000. The owner or operator shall only implement an alternative procedure if the alternative procedure has been deemed acceptable by the Office of Air Quality.

(f) 1510(g): Afterburner Monitoring Requirements:

No changes to the condition pertaining to Paragraph (g) of this Section are necessary because this part of the rule applies to the control devices of the source (afterburners and capture/collection systems). Afterburners have been installed or will be installed at sweat furnaces AS-990 and AS-1000. Changing the status of the furnaces to group 1 furnaces will not affect the language proposed in the permit.

(g) 1510(r): Group 2 Furnace Monitoring Requirements:

The monitoring requirements of Paragraph (r) of Section 1510 that were proposed in the original permit under Condition D.1.20 do not apply anymore because this part of the rule applies to group 2 furnaces (the applicable furnaces AS-990 and AS-1000 have been determined to be group 1 furnaces). Thus, Condition D.1.20 shall be deleted.

~~D.1.20 Charge and Flux [63.1510(r)]~~

~~The owner or operator shall, for sweat furnaces AS-990 and AS-1000:~~

- ~~(a) record a description of the materials charged to each furnace, including any non-reactive, non-HAP-containing/non-HAP-generating fluxing materials or agents; and~~
- ~~(b) submit a certification of compliance with the applicable operational standard for charge materials in Condition D.1.11 for each 6-month reporting period. Each certification shall contain the information required in Condition D.1.31(b)(2).~~

(h) 1510(s): Site Specific Monitoring Requirements for SAPUs:

The site-specific requirements of Paragraph (s) of Section 1510 become applicable because sweat furnaces AS-990 and AS-1000 combine to make a SAPU. Paragraph (s) of Section 1510 applies to SAPUs. Based on this determination, the following condition has been drafted:

D.1.30 Site Specific Requirements for the Secondary Aluminum Processing Unit (SAPU)
[63.1510(s)]

The owner or operator shall, for the secondary aluminum processing unit (sweat furnaces AS-990 and AS-1000), include the operation maintenance and monitoring (OM&M) plan, the following information:

- (a) the identification of each emission unit in the secondary aluminum processing unit,

- (b) the specific control technology or pollution prevention measure to be used for each emission unit in the secondary aluminum processing unit (SAPU) and the date of its installation or application,**
- (c) the emission limit calculated for each secondary aluminum processing unit and performance test results with supporting calculations demonstrating initial compliance with each applicable emission limit,**
- (d) information and data demonstrating compliance for each emission unit with all applicable design, equipment, work practice or operation standards of this Subpart, and**
- (e) the monitoring requirements applicable to each emission unit in a secondary aluminum processing unit and, if applicable, the monitoring procedures for daily calculation of the 3 day, 24 hour rolling average using the procedures specified in Condition D.1.25(a). If the owner or operator utilizes the performance test alternative specified in Condition D.1.31(b), the owner or operator shall include in the OM&M plan, the agreed upon alternate monitoring procedures.**

The SAPU compliance procedures within the operation maintenance and monitoring (OM&M) plan shall not include any averaging among emissions of differing pollutants, the inclusion of any affected units other than emission units in a SAPU, the inclusion of any emission unit while it is shut down, or the inclusion of any periods of startup, shutdown, or malfunction in emission calculations.

To revise the SAPU compliance provisions within the OM&M plan prior to the end of the permit term, the owner or operator shall submit a request to the Office of Air Quality. Said request shall contain the information required in (a) through (e) of this Condition. The owner or operator shall obtain approval from the Office of Air Quality before implementing any revisions.

(i) 1510(t) and (u): SAPU Monitoring Requirements:

The SAPU requirements of Paragraphs (t) and (u) of Section 1510 become applicable because sweat furnaces AS-990 and AS-1000 combine to make a SAPU. Paragraphs (t) and (u) of Section 1510 apply to SAPUs. Based on this determination, the calculations associated with the 3-day, 24-hour average option shall be placed as Condition D.1.25 because compliance is determined by either calculating the 24-hour, 3-day average or by presenting documentation of the individual performance tests that show that each sweat furnace is in compliance with the respective individual unit limits.

D.1.25 Compliance Determination for the Secondary Aluminum Processing Unit (SAPU)
[63.1510(t) and (u)]

The owner or operator shall either:

- (a) demonstrate compliance with the SAPU limit of Condition D.1.8 by calculating the 3 day, 24 hour rolling average dioxin/furan emissions for each SAPU (sweat furnaces AS-990 and AS-1000 combined) on a daily basis. Should the owner or operator choose to demonstrate compliance by calculating the 3-day, 24-hour rolling average, said average shall be calculated as follows:**

- (1) The owner or operator shall first calculate the total weight of material charged to each emission unit in the SAPU (T_i) for each 24 hour day using the feed/charge weight information required in Condition D.1.13.

If the owner or operator chooses to comply on the basis of weight of aluminum produced by the emission unit rather than weight of material charged to the emission unit, all performance test emissions results and all calculations shall be calculated on the aluminum production weight basis.

- (2) The owner or operator shall then determine the total emissions from the SAPU by multiplying the total feed charge weight or the weight of aluminum produced, whichever is applicable, for each emission unit (T_i) for the 24-hour period, by the emission rate (E_{ri}) in lb/ton of feed/charge or lb/ton of aluminum produced, whichever is applicable, for that emission unit (as determined during the most recent performance test) to provide the dioxin/furan emissions for each emission unit for the 24-hour period, in pounds.
- (3) Upon determination of the of the total emissions, the owner or operator shall divide the total emissions for the SAPU for the 24-hour period by the total material charged to the SAPU or the weight of the aluminum produced by the SAPU over the 24-hour period, whichever is applicable, to provide the daily emission rate for the SAPU.

The equation for the calculations described in (a)(1) through (a)(3) of this Condition is listed below:

$$E_{\text{day}} = \frac{\sum [T_i * E_{ri}]}{\sum [T_i]}$$

where: E_{day} = the daily dioxin/furan emissions for the SAPU (sweat furnaces AS-990 plus AS-1000) for the 24 hour period (pounds dioxin/furan)

T_i = the total amount of feed, or aluminum produced, whichever is applicable, for the 24-hour period, from each individual furnace (tons)

E_{ri} = the measured emission rate of each individual furnace as determined in the performance test (lb dioxin,furan/ton)

Upon determination of the total dioxin/furan emissions from the SAPU (AS-990 and AS-1000 combined (E_{day}), the owner or operator shall calculate the 3-day, 24-hour rolling average dioxin/furan emissions in pounds of dioxin/furan by summing the daily dioxin/furan emission rates over the most recent consecutive days and dividing by 3.

or

- (b) as an alternative to the requirements of part (a) of this Condition, provide a copy of the documentation required in Condition D.1.31(b), that demonstrates that each individual emission unit (sweat furnace AS-990 and sweat furnace AS-1000) is in compliance with the dioxin/furan emission limits of Condition D.1.8.

Condition D.1.31 shall be placed in the monitoring section because the monitoring associated with the SAPU limit consists of recording the 24-hour, 3-day average value calculated in Condition D.1.25 or keeping and maintaining performance test results demonstrating that each sweat furnace is in compliance with the individual limits of Condition D.1.8.

D.1.31 Secondary Aluminum Processing Unit (SAPU) Monitoring Requirements [63.1510(t) and (u)]

The owner or operator shall either:

(a) record the 3-day, 24-hour rolling average dioxin/furan emissions calculated in Condition D.1.25(a),

or

(b) as an alternative to the requirements of part (a) of this Condition, keep readily available results of the most recent acceptable compliance stack tests (as required in Condition D.1.22) that demonstrate that sweat furnace AS-990 and sweat furnace AS-1000, each, are in compliance with the individual dioxin/furan emission limits of Condition D.1.8.

(j) 1510(w) Alternative Monitoring Requirements:

The alternative monitoring requirements of Paragraph (w) of Section 1510 are necessary because the alternative monitoring options provided in this part of the rule allow options for both group 1 and group 2 furnaces. However it is determined that any alternative monitoring methods submitted by Heartland Aluminum must be approved by the U.S. EPA, Region V. Therefore Condition D.1.34 shall be amended as follows:

D.1.34 Alternate Monitoring Methods [63.1510(w)]

(a) The owner or operator may, for sweat furnaces AS-990 and AS-1000, submit to the ~~Office of Air Quality (OAQ)~~ United States (U.S.) Environmental Protection Agency (EPA), Region V, an application for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of Subpart RRR, provided the owner or operator:

- (1) continues to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure,**
- (2) submits an application for approval of alternate monitoring methods with said application containing:**
 - (A) data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach,**
 - (B) a description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and**
 - (C) data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s); and**

- (3) submits all required supporting information in a timely manner to the ~~Office of Air Quality (OAQ)~~ **U.S. EPA, Region V**, to allow sufficient consideration of the application. Neither submittal of an application nor the ~~OAQ's~~ **U.S. EPA, Region V's** failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of Subpart RRR.
- (b) Upon receipt of the alternative monitoring plan application, the ~~OAQ~~ **U.S. EPA, Region V**, shall review the alternate monitoring application as follows:
- (1) No averaging periods other than those specified in Section 63.1510 shall be approved.
 - (2) The alternate monitoring application shall only be approved if it is determined that the alternate monitoring plan provides equivalent or better assurance of compliance with the relevant emission standard(s).

Before disapproving any alternate monitoring application, the ~~OAQ~~ **U.S. EPA, Region V**, shall provide notice of:

- (A) the information and findings upon which the intended disapproval is based; and
- (B) an opportunity for the owner or operator to present additional supporting information before final action is taken on the application. Said notice shall specify how much additional time is allowed for the owner or operator to provide additional supporting information.

The ~~Office of Air Quality (OAQ)~~ **U.S. EPA, Region V**, reserves the right to, at any time on a case-by-case basis, require additional or alternative operating limits, or alternative approaches to establishing operating limits, as deemed necessary to ensure that compliance with the emission standards of this subpart is demonstrated.

63.1512: SPECIFIC PERFORMANCE TEST/COMPLIANCE DEMONSTRATION REQUIREMENTS:

The applicable requirements under Section 63.1512 are 1512(d) (Group 1 Furnace With Add-on Air Pollution Control Devices), 1512(f) (Sweat Furnaces), 1512(j) (SAPUs), 1512(k) (Feed/Charge Weight), 1512(m) (Afterburners), 1512(r) (Labeling), and 1512(s) (Capture/Collection Systems).

(a) 1512(d): Specific Test Requirements for Group 1 Furnaces Without Emission Controls:

Although Paragraph (d) of Section 1512 applies to group 1 furnaces with add-on control devices, this paragraph does not apply to sweat furnaces AS-990 and AS-1000 because this part of the rule only pertains to group 1 furnaces with emissions controlled by a lime injected fabric filter, furnaces that utilize reactive flux, and furnaces that are sidewall furnaces. Sweat furnaces AS-990 and AS-1000 are none of these.

(b) 1512(f): Specific Test Requirements for Sweat Furnaces:

No changes to the Conditions in the permit relating to Paragraph (f) of Section 1512 are necessary because this part of the rule applies to both group 1 and group 2 furnaces. Changing from the group 2 category to group 1 category will not change the language of the applicable permit condition.

(c) 1512(j): Specific Test Requirements for SAPUs:

Paragraph (j) of Section 1512 does become applicable because this part of the rule applies to SAPUs. Therefore, the following condition has been drafted.

D.1.22 Dioxin/Furan Testing Requirements [63.1510(j)]

The owner or operator shall perform dioxin/furan testing for sweat furnaces AS-990 and AS-1000 to determine the dioxin/furan emission rates in pounds dioxin/furan TEQ per ton from each emission unit.

Should the results of each performance test demonstrate that sweat furnaces AS-990 and AS-1000 are in compliance with the individual group 1 furnace limitations of Condition D.1.7, the owner or operator may use said results to demonstrate compliance with the SAPU limit of Condition D.1.8 in lieu of the demonstrating compliance through the requirements of Conditions D.1.31(b).

If the results of each performance test does not demonstrate that sweat furnaces AS-990 and AS-1000 are in compliance with the group 1 furnace limitations of Condition D.1.7, the owner or operator shall comply with the monitoring requirements of Condition D.1.31(a) and use the results from the most recent acceptable performance tests to calculate the required SAPU 3-day, 24-hour dioxin/furan emission rates.

(d) 1512(k): Specific Feed/Charge Weight Measurement Testing Requirements:

Paragraph (k) of Section 1512 becomes applicable because changing the furnace status from a group 2 furnace to a group 1 furnace results in a new lb/ton limit. Therefore, the following condition has been drafted.

D.1.23 Feed/Charge (or Aluminum Production Weight) Requirements [63.1510(k)]

During the performance tests required in Condition D.1.22, the owner or operator shall, for sweat furnaces AS-990 and AS-1000, measure (or otherwise determine) and record the total weight of feed/charge (or aluminum production weight), for each of the three required test runs, and calculate and record the total weight.

(e) 1512(m): Specific Testing Requirements for Afterburners:

No changes to the condition pertaining to Paragraph (m) of Section 1512 are necessary because the after burner requirements of this part of the rule apply to the control devices. Changing the status of the furnaces from group 2 to group 1 does not affect the applicable language of the proposed permit.

(f) 1512(r): Specific Labeling Testing Requirements:

No changes to the condition pertaining to Paragraph (r) of Section 1512 are necessary because the labeling requirements of this part of the rule apply to both group 1 and group 2 furnaces. Changing the status of the furnaces from group 2 to group 1 will not require a change in the language of the applicable requirement of the proposed permit.

(g) 1512(s): Specific Capture/Collection System Testing Requirements:

No changes to the condition pertaining to Paragraph (s) of Section 1512 are necessary because this part of the rule applies to the capture/collection systems of the control devices. Changing the status of the furnaces from group 2 to group 1 furnaces will not require a change in the language of the applicable requirements of the permit.

63.1511: GENERAL TESTING REQUIREMENTS FOR THE NESHAP PERFORMANCES TESTS:

Since initial performance tests are required in Section 1512 of 40 CFR 63, Subpart RRR, all of the general performance testing requirements of Section 1511 become applicable and must be included in the permit. Since the testing requirements of Section 1511 are general testing requirements, the condition, drafted as follows, shall be placed in Section C, after the state model general testing requirements.

No specific PM/PM10 testing reference is required in the state model general testing condition because the condition is written such that the owner or operator shall meet the general testing requirements of the NESHAP if the NESHAP has its own general testing requirements. However, the specific NESHAP testing requirements of Conditions D.1.22, D.1.23, and D.1.25 are referenced in the NESHAP general testing condition because the NESHAP general testing requirements apply only to the specific tests required by the NESHAP.

Since the state model testing requirements apply pursuant to state rules, the header of the state model general testing Condition shall be changed to reflect "state" testing requirements.

C.9 State General Performance Testing Requirements [326 IAC 3-6]

The NESHAP general testing requirements are added as follows in Section C as Condition C.10. Since the general testing requirements of Subpart RRR do not specify whose signature is required, the NESHAP general requirement has been amended to state that certification by the authorized individual is not required. This is to be consistent with the state general requirements.

In addition, the NESHAP general testing condition shall include the IDEM mailing address and notification of intent to comply requirements of 40 CFR 63.7(b) to be consistent with the state model Section C general testing condition.

C.10 40 CFR 63, Subpart RRR General Performance Testing Requirements [63.1511]

The owner or operator shall comply with the following testing requirements:

- (a) Prior to conducting the performance tests required in Conditions D.1.22, D.1.23, and D.1.26, the owner or operator shall prepare and submit notification of intent to conduct a performance test and a site-specific test plan meeting the requirements of 40 CFR 63.7(c). Said test protocol shall be submitted to:**

**Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015**

at least sixty (60) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) Following approval of the site-specific test plan, the owner or operator shall demonstrate initial compliance with each applicable emission, equipment, work practice, or operational standard for each affected source emission unit as follows, and report the results in the notification of compliance status report described in Condition D.1.35(b).

- (1) The owner or operator shall conduct each performance test according to the requirements of the general provisions of Subpart A of Part 63 and this Subpart.
- (2) The owner or operator shall conduct each test while the respective sweat furnace is operating at the highest production level with charge materials representative of the range of materials processed by the unit, and if applicable, at the highest reactive fluxing rate.
- (3) Each performance test for a batch process shall consist of three (3) separate runs, with pollutant sampling for each run being conducted for the time period specified in the applicable method or, in the absence of a specific time period in the test method, for a minimum of three (3) hours.
- (4) Each performance test for a batch process shall consist of three (3) separate runs, with the pollutant sampling for each run being conducted over the entire process operating cycle.
- (5) Where multiple affected sources or emission units are exhausted through a common stack, pollutant sampling for each run shall be conducted for a period of time during which all affected sources or emission units complete at least 1 entire process operating cycle or for 24 hours, whichever is shorter.
- (6) Initial compliance with an applicable emission limit or standard shall be considered demonstrated if the average of the required three (3) runs conducted during the performance test is less than or equal to the applicable emission limit or standard.

(c) The owner or operator shall use the following test methods found in 40 CFR 60, Appendix A, as applicable, to determine compliance with the applicable emission limits or standards:

- (1) Method 1 for sample and velocity traverses,
- (2) Method 2 for velocity and volumetric flow rate,
- (3) Method 3 for gas analysis,
- (4) Method 4 for moisture content of gas,
- (5) Method 5 for concentration of PM,
- (6) Method 9 for visible emission observations,
- (7) Method 23 for the concentration of dioxins/furans,
- (8) Method 25A for the concentration of THC, and
- (9) Method 26A for the concentration of HCl.

The owner or operator may use an alternative test methods in lieu of the test methods specified in this Condition provided that said test method(s) is/are approved by the Office of Air Quality.

- (d) The owner or operator shall establish a minimum or maximum operating parameter value, or an operating parameter range for each parameter to be monitored as required by 63.1510, that ensures compliance with the applicable emission limit or standard. To establish the minimum or maximum value or range, the owner or operator shall use the appropriate procedures in this Condition and submit the information in the notification of compliance status report as specified in Condition D.1.35(b).**
- (e) The owner or operator may use existing data in addition to the test results of performance tests to establish operating parameter values for compliance monitoring provided each of the following conditions are met to the satisfaction of the Office of Air Quality:**
- (1) The complete emission test report(s) used as the basis of the parameter(s) is submitted.**
 - (2) The same test methods and procedures as required by this Subpart were used in the test.**
 - (3) The owner or operator certifies that no design or work practice changes have been made to the source, process, or emission control equipment since the time of the report.**
 - (4) All process and control equipment operating parameters required to be monitored were monitored as required in this Subpart and documented in the test report.**

All other Conditions of Section C after Condition C.10 shall be renumbered accordingly.

63.1513: EQUATIONS FOR DETERMINING COMPLIANCE:

The applicable requirements under Section 63.1513 are Paragraphs (b) (PM, HCl, and D/F Emission Limits), (d) (Conversion of D/F Measurements to TEQ Units), (e) (Secondary Aluminum Processing Units).

The equations of Paragraphs (b), (d), and (e) of Section 1513 apply because there is an applicable dioxin/furan limit, the sweat furnaces combine into a SAPU, and the dioxin/furan limits are in TEQ.

Based on the above determination, the following conditions are drafted. Since the equation are used as part of the means of determining compliance with the limits, the condition shall be added into the Compliance Determination Section as Condition D.1.24.

D.1.24 Equations for Determining Compliance [63.1513(b), (d), and (e)]

To demonstrate compliance with the limits of Conditions D.1.6, D.1.7, and D.1.8, the owner or operator shall use the following:

- (a) for conversion of gr/dscf or lb/ton to gr TEQ/dscf or lb TEQ/ton, respectively, the owner or operator shall use the procedures and equation in "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (CDDs and CDFs) and 1989 Update" (EPA-625/3-89-016), available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia, NTIS no. PB-145756.**

(b) for conversion of gr/dscf to lb/ton:

$$E = \frac{C * Q}{P * 7000}$$

where: E = dioxin/furan emission rate (lb/ton feed or aluminum produced)
C = dioxin/furan concentration (gr/dscf)
Q = volumetric flow rate of exhaust gases (dscf/hr)
P = production rate (ton/hr)

(c) to determine compliance with the SAPU limit of Condition D.1.8, the owner or operator shall either:

(1) compute the mass weighted dioxin/furan emissions for the SAPU using the following equation to demonstrate compliance with the SAPU limit of Condition D.1.8:

$$E_{cD/F} = \frac{\sum [E_{tiD/F} * T_{ti}]}{\sum [T_{ti}]}$$

where: $E_{cD/F}$ = the mass weighted dioxin/furan emissions for the SAPU
 $E_{tiD/F}$ = measured dioxin/furan emissions
 T_{ti} = the average feed rate for individual emission unit during the operating cycle or performance test period

Compliance with the SAPU limit of Condition D.1.8 shall be considered achieved if the estimated mass weighted dioxin/furan emissions for the SAPU is less than or equal to the SAPU limit of Condition D.1.8.

or

(2) as an alternative to using equation of part (c)(1) of this Condition, the owner or operator may demonstrate compliance for the SAPU by demonstrating that sweat furnace AS-990 and AS-1000 is in compliance with the individual group 1 emission limits of Condition D.1.7.

All other Conditions in Section D.1 after D.1.24 shall be renumbered accordingly.

63.1514: RESERVED

63.1515: NOTIFICATIONS:

The applicable requirements under Section 1515 are 1515(a) (Initial Notifications) and 1515(b) (Notification of Compliance Status Report).

1515(a) and (b): Initial Notification and Notification of Compliance Status Report:

No changes need to be made to the proposed permit condition regarding Paragraphs (a) and (b) of Section 1515 because this part of the rule applies to any affected unit that is subject to or becomes subject to the requirements of Subpart RRR. Changing the status of the sweat furnaces from group 2 to group 1 will not affect the respective condition of the proposed permit.

63.1516: REPORTS:

The applicable requirements under Section 1516 are 1516(a) (Startup, Shutdown, and Malfunction Plan/Reports), 1516(b) (Excess Emissions/Summary Report), and 1516(c) (Annual Compliance Certifications).

1516(a), (b), and (c): Startup, Shutdown, and Malfunction Plan/Report, Excess Emissions/Summary Report, and Annual Compliance Certification:

No changes need to be made to the proposed permit condition regarding Paragraphs (a), (b), and (c) of Section 1516 because this part of the rule applies to any affected unit that is subject to or becomes subject to the requirements of Section 1516. Changing the status of the sweat furnaces from group 2 to group 1 will not affect the respective condition of the proposed permit.

63.1517: RECORDS:

The applicable requirements under Section 1517 are 1517(a) (General Record Keeping Requirements) and 63.1517(b) (Specific Record Keeping Requirements).

(a) 1517(a): General Record Keeping Requirements:

No changes need to be made to the proposed permit condition regarding Paragraph (a) of Section 1517 because this part of the rule applies to any affected unit that is subject to or becomes subject to the requirements of Section 1517. Changing the status of the sweat furnaces from group 2 to group 1 will not affect the respective condition of the proposed permit.

(b) 1517(b): Specific Record Keeping Requirements:

The specific record keeping requirements of the condition related to Paragraph (b) of Section 1517 must be amended to include the feed/charge requirements of (b)(7) because there is a new lb/ton limit, remove (b)(12) because this part of the rule applies to group 2 furnaces, and include (b)(17) because this part of the rule applies to SAPUs and sweat furnaces AS-990 and AS-1000 combined for a SAPU.

Based on the above determination, the record keeping requirements (now Condition D.1.35) are amended as follows:

D.1.2936 Record Keeping for 40 CFR 63, Subpart RRR [63.1517]

The owner or operator shall keep records as follows:

- (a) As required by Sec. 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and Subpart RRR.
 - (1) The owner or operator shall retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records shall be retained at the facility. The remaining 3 years of records may be retained off site.
 - (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
 - (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

Should any general record keeping requirement(s) of this condition conflict with any general record keeping requirements of Condition C.20, the owner or operator shall comply with the more stringent applicable requirement(s).

(b) In addition to the general records required by Sec. 63.10(b), the owner or operator of a new or existing affected source shall maintain records of:

(1) For sweat furnace AS-990 and AS-1000 afterburners:

- (A) Records of the afterburner operating temperature, including any period when the temperature falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and
- (B) Records of annual afterburner inspections.

(2) For each continuous monitoring system, records required by Sec. 63.10(c).

~~(3) Records of all charge materials and fluxing materials or agents for sweat furnaces AS-990 and AS-1000.~~

(3) Records of all feed/charge (or throughput) weights of sweat furnaces AS-990 and AS-1000, for each operating cycle or time period used in the performance test.

(4) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.

(5) Records of annual inspections of emission capture/collection and closed vent systems.

(6) Records for any approved alternative monitoring or test procedure.

(7) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:

- (A) Startup, shutdown, and malfunction plan;
- (B) For major sources, OM&M plan; and
- (C) Site-specific secondary aluminum processing unit emission plan (if applicable).

(8) For the secondary aluminum processing unit (sweat furnaces AS-990 and AS-1000), records of the combined total feed/charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and, if applicable, calculations of the 3-day, 24 hour rolling average emissions.

63.1518: APPLICABILITY OF GENERAL PROVISIONS:

No changes to the general provision requirements are necessary because the general provisions apply to both group 1 and group 2 furnaces. Changing the status of the sweat furnaces from group 2 to group 1 will not affect the language in the proposed permit.

63.1519: DELEGATION OF AUTHORITY:

No changes need to be made because no conditions have been or will be drafted in the permit regarding this Section.

63.1520: RESERVED

The table of contents has been amended to reflect the changes to Sections C and D of the permit.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name: Heartland Aluminum
Source Location: 125 S Nancy, Warren, Indiana 46792
County: Huntington
SIC Code: 5093
Operation Permit No.: F 069-14274-00060
Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed an application from Heartland Aluminum relating to the construction and operation of an additional aluminum sweat furnace to their existing secondary metals reclamation operation.

History:

On June 9, 1999, Heartland Aluminum was issued a Minor Source Operating Permit (069-10650-00060) for a secondary metals reclamation operation. The emission unit associated with the proposed source is one aluminum sweat furnace (AS-1000) with a maximum design throughput of 0.5 tons per hour. The unrestricted potential to emit of the worst case Part 70 criteria pollutant (PM10) is determined to be 28.58 tons per year. The hazardous air pollutant emissions are determined to be negligible.

On April 16, 2001, Heartland Aluminum submitted an application to construct and operate an additional aluminum sweat furnace, identified as AS-990, with a maximum design throughput of 1.25 tons per hour. The worst case Part 70 criteria pollutant emissions (PM10) are estimated to be 71.45 tons per year with the hazardous air pollutant emissions determined to be negligible.

After application of the proposed sweat furnace, the source unrestricted potential to emit is determined to be 100.03 tons per year which exceeds the Part 70 applicable threshold of 100 tons per year.

Therefore, the source has the option of obtaining either a Part 70 (title V) permit under 326 IAC 2-7 or a Federally Enforceable State Operating Permit (FESOP) under 326 IAC 2-8.

On March 23, 2000, the U. S. Environmental Protection Agency (U.S. EPA) issued a National Emission Standard for Hazardous Air Pollutants (NESHAP)(326 IAC 20 and 40 CFR Part 63, Subpart RRR) for the secondary aluminum production source category. The existing and proposed sweat furnaces are subject to the requirements of this rule.

Subpart RRR requires sources that are subject to the requirements of this rule to obtain a Part 70 major source permit. This rule also allows the Office of Air Quality the power to defer the requirement to submit a Title V permit application until December 9, 2005, provided the affected units are not located at a major source under 40 CFR 63.2 (single and combined HAP emissions greater than 10 and 25 tons/yr, respectively) and the source is not otherwise required to obtain a Title V permit.

The source HAP emissions (negligible) are less than the 40 CFR 63.2 levels. The source PM10 emissions, however, exceed the Part 70 applicable level of 100 tons/yr. Thus, the source cannot be deferred from the Title V requirements unless the source PM10 emissions are reduced to less than the Part 70 level of 100 tons/yr. This limitation can be obtained through a Federally Enforceable State Operating Permit (FESOP) under 326 IAC 2-8.

Thus, Heartland Aluminum has opted to use emission controls (afterburners at sweat furnaces AS-990 and AS-1000) via a FESOP to reduce the PM10 emissions instead of obtaining a Part 70 Permit.

Issuing the source a FESOP provides the means by which both criteria for deferment of the requirement to submit a Title V application under 40 CFR 63, Subpart RRR are satisfied.

Thus, Heartland Aluminum shall not be required to submit a Part 70 application until December 9, 2005.

Existing Approvals

This source has been operating under New Source Construction/MSOP (069-10650-00060), issued on June 9, 1999.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temp. (°F)
EP-01	Sweat Furnace	28	2	1803	1500
EP-02	Sweat Furnace	28	2	3980	1600

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Federally Enforceable State Operating Permit (FESOP) be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application submitted by the applicant.

An administratively complete application for the purposes of this review was received on April 16, 2001.

Emission Calculations

UNRESTRICTED POTENTIAL TO EMIT (PTE):

Heartland Aluminum has proposed the installation of an additional aluminum sweat furnace to process an additional 1.25 tons of scrap metal per hour. The existing source currently consists of one other sweat furnace which has a maximum design throughput of 0.5 tons of scrap metal per hour.

The emissions generated by this aluminum reclamation operation are all criteria pollutants due to metal melting and recovery, and all criteria pollutants and various hazardous air pollutants (HAP) due to natural gas combustion.

The following calculations determine the unrestricted potential to emit.

Metal Melting and Recovery Emissions:

The following calculations determine the metal melting and recovery emissions based on maximum design throughputs of 0.50 and 1.25 tons/hr, emission factors from EPA AP-42, Chapter 12.8, emissions before controls, and 8760 hours of operation.

$$\text{Tons/hr} * \text{Ef (lb/ton)} * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb} = \text{tons Pollutant/yr}$$

	PM 14.5 lb/ton	PM10 13.05 lb/ton	SO2 3.5 lb/ton	NOx 0.60 lb/ton	VOC 0.20 lb/ton	CO neg. lb/ton
New Sweat Furnace	79.39	71.45	19.16	3.29	1.10	-
Existing Sweat Furnace	31.76	28.58	7.67	1.31	0.44	-
Total	111.15	100.03	26.83	4.60	1.54	-

Natural Gas Combustion Emissions:

The following calculations determine the natural gas combustion emissions from the primary and after burners based on a combined maximum capacities of 6.00 and 3.40 MMBtu/hr, EPA AP-42 emission factors, Chapter 1.4, emissions before controls, and 8760 hours of operation.

$$\text{MMBtu/hr} * 1 \text{ E6 Btu/MMBtu} * 1/1000 \text{ cf/Btu} * 1/1 \text{ E6 MMcf/cf} * \text{Ef lb poll/MMcf} = \text{lb/hr}$$

$$\text{lb/hr} * 8760 \text{ hr/yr} * 1/2000 \text{ ton poll/lb poll} = \text{ton poll/yr}$$

Ef (lb/MMcf)	PM 7.60	PM10 7.60	SO2 0.60	NOx 94.00	VOC 5.50	CO 40.00	Comb. HAP (various)
New Combustion	0.20	0.20	0.02	2.47	0.14	1.05	neg.
Existing Combustion	0.11	0.11	0.01	1.40	0.08	0.60	neg.
Total	0.31	0.31	0.03	3.87	0.22	1.65	neg.

Total Unrestricted Potential to Emit:

The total unrestricted potential to emit is the sum of the furnace and combustion emissions. The following table is a summary of these emissions.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAP tons/yr
Furnace	111.15	100.03	26.83	4.60	1.54	-	neg.
Combustion	0.31	0.31	0.03	3.87	0.22	1.65	neg.
Emissions Before Controls	111.46	100.34	26.86	8.47	1.76	1.65	neg.

POTENTIAL EMISSIONS AFTER CONTROLS:

The PM, PM10, and VOC emissions from the sweat furnaces are controlled by an afterburner with a design control efficiency of 97%.

The following calculations determine the PM, PM10, and VOC emissions after controls based on the a control efficiency of 97% and the estimated PM/PM10 emissions before controls.

PM: 111.15 tons/yr * (1 - 0.97) = 3.33 tons PM/yr
PM10: 100.03 tons/yr * (1 - 0.97) = 3.00 tons PM10/yr
VOC: 1.54 tons/yr * (1 - 0.97) = 0.05 tons VOC/yr

All other emissions are uncontrolled. The following is a summary of the emissions after controls.

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAP tons/yr
Furnace	3.33	3.00	26.83	4.60	0.05	-	-
Combustion	0.31	0.31	0.03	3.87	0.22	1.65	neg.
Emissions After Controls	3.64	3.31	26.86	8.47	0.27	1.65	neg.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Modification:

The following is the unrestricted potential to emit due to the proposed modification.

Pollutant	Potential To Emit (tons/year)
PM	79.59
PM10	71.65
SO ₂	19.18
VOC	1.24
CO	1.05
NO _x	3.43

	Worst Case Single HAP	Combined HAPs
tons/yr	neg.	neg.

Pursuant to 326 IAC 2-6.1-6(i), changes to a MSOP that are not a notice-only change or a minor permit revision pursuant to 326 IAC 2-6.1-6(d) or (g), respectively, and have potential to emit greater than the levels specified in 326 IAC 2-6.1-6(i)(1)(E), require a significant permit revision.

The proposed furnace potential to emit (as defined in 326 IAC 2-1.1-1(16)) of the single and combined HAPs is less than 10 and 25 tons/yr, respectively. However, the PM and PM10 emissions each exceed their respective applicable levels of 25 tons/yr. Thus, the proposed modification qualifies for a significant permit revision pursuant to 326 IAC 2-6.1-6(i)(E).

Source After Modification:

The following is the unrestricted potential to emit from the source after the modification.

Pollutant	Potential To Emit (tons/year)
PM	111.46
PM10	100.34
SO ₂	26.86
VOC	1.76
CO	1.65
NO _x	8.47

	Worst Case Single HAP	Combined HAPs
tons/yr	neg.	neg.

Pursuant to 326 IAC 2-7-4(a)(1)(A), sources that become subject to the Part 70 requirements shall submit a timely Title V or FESOP application within 12 months after the source becomes subject to the Part 70 requirements.

Since the source unrestricted PM10 PTE is greater than the Part 70 applicable level of 100 tons/yr, the source is also required to submit a Title V or FESOP application within 12 months of commencement of operation of the proposed modification.

However, the source can, through 40 CFR 63, Subpart RRR, defer submittal of a Title V permit application until December 9, 2005 by obtaining a FESOP which allows the use of emission controls to reduce the PM10 emissions to below the Part 70 applicable threshold. Therefore, the source shall be granted a FESOP under 326 IAC 2-8.

County Attainment Status

The source is located in Huntington County.

Pollutant	Status
PM-10	attainment/unclassifiable
SO ₂	attainment/unclassifiable
NO ₂	attainment/unclassifiable
Ozone	attainment/unclassifiable
CO	attainment/unclassifiable
Lead	attainment/unclassifiable

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

- (b) Huntington County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD and Part 70 Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Comb. HAP tons/yr
Furnace	3.33	3.00	26.83	4.60	0.05	-	-
Combustion	0.31	0.31	0.03	3.87	0.22	1.65	neg.
Emissions After Controls	3.64	3.31	26.86	8.47	0.27	1.65	neg.

Part 70 Thresholds (tons/yr)	N/A	100	100	100	100	100	25
PSD Major Source Levels	250	250	250	250	250	250	N/A

- (a) This new source is not a major PSD stationary source because no regulated attainment criteria pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.
- (c) This existing source is not at this time a major Part 70 source because the PM10 PTE is limited to less than 100 tons/yr through a FESOP.

However, if no changes are made to the source that increase emissions to the levels that establish the source as a major Part 70 source, the source will be defined a major Part 70 source on December 9, 2005, pursuant to 40 CFR 63, Subpart RRR.

Federal Rule Applicability

New Source Performance Standards (NSPS):

40 CFR 60, Subpart S, Standards of Performance for Primary Aluminum Reduction Plants:

The proposed modification is not subject to the requirements of 40 CFR 60, Subpart S, "Standards of Performance for Primary Aluminum Reduction Plants", because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191.

National Emission Standard for Hazardous Air Pollutants (NESHAP):

The two aluminum sweat furnaces are subject to 40 CFR 63, Subpart RRR because the existing and proposed furnaces are affected area sources as defined in 63.1500(c)(3), and the furnaces are not any of the exemptions under Section 63.1500(d) and (e).

The following rule language has been adjusted. Crossouts show language that was deleted. Bold shows language that was added/paraphrased.

Sec. 63.1501: Compliance Dates:

Pursuant to 40 CFR 63, Subpart RRR, Section 63.1501, the owner or operator shall achieve compliance with the requirements of Subpart RRR by the following dates:

- (a) aluminum sweat furnace AS-1000: by March 24, 2003.
- (b) aluminum sweat furnace AS-990: upon startup.

Heartland Aluminum has stated that they will be compliance with both furnaces by startup.

Sec. 63.1502: Incorporation By Reference

Sec. 63.1503: Definitions

Sec. 63.1504: Reserved

Sec. 63.1505: Emission Standards and Limitations

- (f) Sweat Furnace:

~~The owner or operator of a sweat furnace shall comply with the emission standard of paragraph (f)(2) of this section.~~

- ~~(1) The owner or operator is not required to conduct a performance test to demonstrate compliance with the emission standard of paragraph (f)(2) of this section, provided that, on and after the compliance date of this rule, the owner or operator operates and maintains an afterburner with a design residence time of two seconds or greater and an operating temperature of 1600°F or greater.~~

- ~~(2) On and after the date the initial performance test is conducted or required to be conducted, or if no compliance stack test is required, on and after the compliance date of this rule, whichever date is earlier, t~~ The owner or operator of a sweat furnace at a secondary aluminum production facility that is a major source **must shall** not discharge or cause to be discharged to the atmosphere, **dioxin/furan** emissions **from sweat furnaces AS-990 or AS-1000**, in excess of ~~0.80 nanogram (ng) of D/F TEQ per dscm (3.5 X 10⁻¹⁰ gr/dscf TEQ)~~ **at eleven percent (11%) oxygen (O₂).**

Note: Heartland Aluminum has opted to install afterburners at sweat furnaces AS-990 and AS-1000 and shall operate each afterburner at the required operating temperature of 1600 °F with design residence time being 2 seconds. Thus, no initial compliance stack tests shall be required for these units. This is according to 63.1505(f)(1).

Sec. 63.1506: Operating Requirements:

- (a) Summary:

- ~~(1) On and after the date on which the initial performance test is conducted or required to be conducted, whichever date is earlier, t~~ The owner or operator **must shall** operate:

sweat furnaces AS-990 and AS-1000 and their associated control equipment according to the requirements of Subpart RRR upon startup.

- ~~(2) The completion of the initial performance tests for SAPUs shall be considered to be the date of approval of the OM&M plan by the permitting authority.~~
- ~~(3) The owner or operator of an existing sweat furnace that meets the specifications of Sec. 63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section on and after the compliance date of this standard.~~
- ~~(4) The owner or operator of a new sweat furnace that meets the specifications of Sec. 63.1505(f)(1) must operate the sweat furnace and control equipment according to the requirements of this section by March 23, 2000 or upon startup, whichever is later.~~
- ~~(5) Operating requirements are summarized in Table 2 of this subpart.~~

(b) Labeling:

The owner or operator ~~must~~ **shall** provide and maintain easily visible labels **that shall be** posted at ~~group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/delacquering kiln/decoating kiln~~ sweat furnaces AS-990 and AS-1000. ~~that identifies~~ **Said labels shall identify** the applicable emission limits and means of compliance, including:

- ~~(4a) The type of affected source or emission unit (e.g., scrap dryer/delacquering kiln/decoating kiln, group 1 furnace, group 2 furnace, in-line fluxer); and~~
- ~~(2b) The applicable operational standard(s) and control method(s) (work practice or control device). This includes, but is not limited to, the type of charge to be used for a furnace (e.g., clean scrap only, all scrap, etc.), flux materials and addition practices, and the applicable operating parameter ranges and requirements as incorporated in the OM&M plan.~~
- ~~(3) The afterburner operating temperature and design residence time for a scrap dryer/delacquering kiln/decoating kiln.~~

(c) Capture/Collection Systems:

~~For each affected source or emission unit equipped with an add-on air pollution control device, the owner or operator must~~ **The owner or operator shall:**

- ~~(4) Design, and install,~~ **operate, and maintain at sweat furnaces AS-990 and AS-1000, a** system for the capture and collection of **particulate matter, PM10, and dioxin/furan emissions . Said capture/collection systems shall:**
- ~~(a) to meet the engineering standards for minimum exhaust rates as published by the American Conference of Governmental Industrial Hygienists in chapters 3 and 5 of "Industrial Ventilation: A Manual of Recommended Practice" (incorporated by reference in 63.1502 of this subpart);~~
- ~~(b) Vent captured emissions through a closed system, except that dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter; and~~

- (c) ~~be operated at all times the each respective capture/collection system~~ **sweat furnaces are in operation**, according to the procedures and requirements in the OM&M plan.

(h) Sweat Furnace Afterburners:

The owner or operator ~~of a sweat furnace with emissions controlled by an afterburner must~~ **shall, for the afterburners of sweat furnaces AS-990 and AS-1000, :**

- (1) ~~Maintain the 3-hour block average operating temperature of each afterburner at or above:~~
(i) ~~The average temperature established during the performance test; or~~
(ii) ~~1600 degrees Fahrenheit (°F) if a performance test was not conducted, and the afterburner meets the specifications of 63.1505(f)(1);~~ **with the minimum design residence time being no less than two seconds.**
(2) ~~Operate each afterburner in accordance with the OM&M plan. [moved to Condition D.1.12]~~

Satisfying the operating requirements of this Condition shall be considered sufficient to demonstrate compliance with the dioxin/furan limit of Condition D.1.5. Thus, no compliance stack tests for dioxin/furan emissions shall be required.

Note: Pursuant to 63.1503, group 2 furnaces are defined as furnaces of any design that process clean charge with non-reacting fluxes. Both sweat furnaces AS-990 and AS-1000 process clean charge and use non-reacting fluxes. Sweat furnaces AS-990 and AS-1000 are therefore determined to be group 2 furnaces.

(o) Group 2 Furnaces:

The owner or operator ~~of a new or existing group 2 furnace must:~~ **shall utilize**

- (1) ~~Operate each furnace using only clean charge as the feedstock; and~~
(2) ~~Operate each furnace using non-reactive fluxes at sweat furnaces AS-990 and AS-1000.~~

(p) Corrective Action:

When a process parameter or add-on air pollution control device operating parameter deviates from the value or range established and incorporated in the OM&M plan, the owner or operator ~~must~~ **shall** initiate corrective action.

~~The~~ **Corrective action taken, must shall** restore operation of the affected source or emission unit (including the process or control device) to its normal or usual mode of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

In addition, the ~~Corrective actions taken must shall~~ include follow-up actions necessary to return the process or control device parameter level(s) to the **applicable** value or range of values, ~~established during the performance test~~ and steps to prevent the likely recurrence of the cause of a deviation.

63.1510 Compliance Determination and Compliance Monitoring:

(b) Operation, Maintenance, and Monitoring (OM&M) Plan:

The owner or operator must **shall, for sweat furnaces AS-990 and AS-1000**, prepare and implement ~~for each new or existing affected source and emission unit~~, a written operation, maintenance, and monitoring (OM&M) plan.

~~The owner or operator must~~ **Said OM&M plan shall be implemented at startup, but need only be submitted** submit the plan to the applicable permitting authority **Office of Air Quality (OAQ)** for review and approval **as part of the application for a Part 70 or Part 71 permit application required to be submitted by December 9, 2005**. Any subsequent changes to the plan must be submitted to the applicable permitting authority for review and approval. Pending approval by the applicable permitting authority of an initial or amended plan, the owner or operator must comply with the provisions of the submitted plan. Each plan must contain the following information: **Said OM&M shall include, at a minimum, the following requirements:**

- (a) ~~for each P~~process and control device, **the operating** parameters to be monitored to determine compliance, ~~along with~~ **and any applicable** established operating levels or ranges, ~~for each process and control device~~; ;
- (b) ~~A a~~ monitoring schedule for each ~~affected source and emission unit~~ sweat furnace;
- (c) **a list of the P**procedures for the proper operation and maintenance of each process unit and add-on control device used to meet the applicable emission limits ~~or standards in Sec. 63.1505~~; **of Condition D.1.5**;
- (d) **a list of the P**procedures for the proper operation and maintenance of the monitoring devices or systems used to determine compliance, including:
 - (1) **the procedures for E**calibration and certification of accuracy of each monitoring device, at least once every 6 months, according to the manufacturer's instructions; and
 - (2) **the P**procedures for the quality control and quality assurance of **the required** continuous emission ~~or opacity~~ monitoring systems as required by the general provisions in 40 CFR 63, Subpart A ~~of this Part~~;
- (e) **a list of the P** procedures for monitoring process and control device parameters, including procedures for annual inspections of afterburners; ~~and if applicable, the procedure to be used for determining charge/feed (or throughput) weight if a measurement device is not used~~.
- (f) **a list of the E**corrective actions to be taken when process or operating parameters or add-on control device parameters deviate from the value or range established in paragraph **(a)** ~~(b)(4)~~ of this ~~section~~ **Condition**, including:
 - (1) **the P**procedures to determine and record the cause of an deviation or excursion, and the time the deviation or excursion began and ended; and
 - (2) **the P**procedures for recording the corrective action taken, the time corrective action was initiated, and the time/date corrective action was completed; **and**
- (g) ~~Aa~~ maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- ~~(8) Documentation of the work practice and pollution prevention measures used to achieve compliance with the applicable emission limits and a site-specific monitoring plan as required in paragraph (c) of this section for each group 1 furnace not equipped with an add-on air pollution control device.~~

All subsequent proposed changes to the plan shall also be submitted to the Office of Air Quality (OAQ) for review and approval, and shall include, at a minimum, the most recent updated information requested in (1) through (7). Pending approval by the OAQ of an initial or amended plan, the owner or operator shall comply with the provisions of the most recent existing approved plan.

(c) Labeling:

The owner or operator ~~must~~ **shall, for sweat furnaces AS-990 and AS-1000**, inspect the labels **required in Condition D.1.15** ~~for each group 1 furnace, group 2 furnace, in-line fluxer and scrap dryer/deacquering kiln/decoating kiln~~ at least once per calendar month to confirm that **the** posted labels ~~as required by the operational standard in Sec. 63.1506(b)~~ are intact and legible.

(d) Capture/Collection System:

The owner or operator ~~must~~ **shall,**

~~(1) [moved to CD condition D.1.10]~~

~~install, operate, and maintain a capture/collection system for each affected source and emission unit equipped with an add-on air pollution control device; and~~

~~(2)~~ **for sweat furnaces AS-990 and AS-1000**, inspect each capture/collection and closed vent system at least once each calendar year to ensure that each system is operating in accordance with the operating requirements in ~~Sec. 63.1506(c)~~ **Condition D.1.13** and record the results of each inspection.

(g) Afterburner:

~~These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.~~

The owner or operator shall design, install, operate, and maintain, afterburners at sweat furnaces AS-990 and AS-1000. Said afterburners shall be operated at all times the respective sweat furnaces are in operation, in accordance with the OM&M plan.

~~(1) The owner or operator must install, calibrate, maintain, and operate a device to continuously monitor and record the operating temperature of the each afterburner consistent with the requirements for continuous monitoring systems in 40 CFR 63, Subpart A of this part [moved to Condition D.1.9].~~

~~(2) The temperature monitoring device must shall meet each of the following performance and equipment specifications:~~

~~(i) The temperature monitoring device must be installed at the exit of the combustion zone of each afterburner. [moved to Condition D.1.14]~~

~~(ii) The monitoring system must record the temperature in 15 minute block averages and determine and record the average temperature for each 3-hour block period.~~

~~(iii) The recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 63.1512(m). [moved to Condition D.1.23]~~

- ~~(iv) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator. [moved to Condition D.1.23]~~
- (3) ~~The owner or operator must conduct an inspection of each afterburner at least once a year and record the results, with each inspection including, at a minimum:~~
 - ~~(i) Inspection of all burners, pilot assemblies, and pilot sensing devices for proper operation and clean pilot sensor;~~
 - ~~(ii) Inspection for proper adjustment of combustion air;~~
 - ~~(iii) Inspection of internal structures (e.g., baffles) to ensure structural integrity;~~
 - ~~(iv) Inspection of dampers, fans, and blowers for proper operation;~~
 - ~~(v) Inspection for proper sealing;~~
 - ~~(vi) Inspection of motors for proper operation;~~
 - ~~(vii) Inspection of combustion chamber refractory lining and clean and replace lining as necessary;~~
 - ~~(viii) Inspection of afterburner shell for corrosion and/or hot spots;~~
 - ~~(ix) Documentation verifying that, for the burn cycle following the inspection, the afterburner is operating properly and all necessary adjustments have been made; and~~
 - ~~(x) Verification that the equipment is maintained in good operating condition.~~
 - ~~(xi) Following an equipment inspection, all necessary repairs must be completed in accordance with the requirements of the OM&M plan. [moved to Condition D.1.21]~~

(r) Group 2 Furnace:

~~These requirements apply to the owner or operator of a new or existing group 2 furnace. The owner or operator must shall, for sweat furnaces AS-990 and AS-1000:~~

- ~~(1) R record a description of the materials charged to each furnace, including any non-reactive, non-HAP-containing/non-HAP-generating fluxing materials or agents; ; and~~
- ~~(2) S submit a certification of compliance with the applicable operational standard for charge materials in Sec. 63.1506(e) Condition D.1.10 for each 6-month reporting period. Each certification must shall contain the information in Sec. 63.1516(b)(2)(v) Condition D.1.31(b)(2).~~

(w) Alternative Monitoring Methods:

- (a) ~~An~~ **The owner or operator may, for sweat furnaces AS-990 and AS-1000, submit an application to the Administrator Office of Air Quality (OAQ), an application for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this Ssubpart RRR, subject to the provisions of paragraphs (w)(1) through (6) of this section provided the owner or operator:**
 - ~~(1) The Administrator will not approve averaging periods other than those specified in this section.~~
 - ~~(2) The owner or operator must continue to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure.~~

- ~~(3) The owner or operator shall submit for approval of alternate monitoring methods no later than the notification of the performance test. The application must contain the information specified in paragraphs (w)(3)(i) through (iii) of this section:~~
 - ~~(i) Data or information justifying the request, such as the technical or economic feasibility, or impracticality of using the required approach;~~
 - ~~(ii) A description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and~~
 - ~~(iii) Data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s).—~~
- ~~(4) The administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emissions standard(s). Before disapproving any alternate monitoring application, the Administrator will provide:~~
 - ~~(i) Notice of information and findings upon which the intended disapproval is based; and~~
 - ~~(ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional information.~~
- ~~(5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provisions of this subpart.~~
- ~~(6) The Administrator may decide at any time, on a case-by-case basis, that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.~~
- (1) continues to use the original monitoring requirement until necessary data are submitted and approval is received to use another monitoring procedure,**
- (2) submits an application for approval of alternate monitoring methods with said application containing:**
 - (A) data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach,**
 - (B) a description of the proposed alternative monitoring requirements, including the operating parameters to be monitored, the monitoring approach and technique, and how the limit is to be calculated; and**
 - (C) data and information documenting that the alternative monitoring requirement(s) would provide equivalent or better assurance of compliance with the relevant emission standard(s); and**

- The Office of Air Quality (OAQ) reserves the right to, at any time on a case-by-case basis, require additional or alternative operating limits, or alternative approaches to establishing operating limits, as deemed necessary to ensure that compliance with the emission standards of this subpart is demonstrated.

No alternative test methods because no initial or repeated testing is required.

(e) Repeat Tests:

No repeated testing required because the affected sources and emission units are not major.

(f) Testing of Representative Emission Units:

Doesn't apply because no testing is required.

(g) Establishment of Monitoring and Operating Parameter Values:

Doesn't apply because operating temperature already established in 1505(f)(1).

Sec. 63.1512: Performance Test/Compliance Demonstration Requirements and Procedures:

(f) Sweat Furnace:

Not applicable because 1510(f) requires no performance test and monitoring is already required in (f).

(m) Afterburner:

~~These requirements apply to the owner or operator of an affected source using an afterburner to comply with the requirements of this subpart.~~

- ~~(1) Prior to the initial performance test, The owner or operator must shall~~ conduct a performance evaluation ~~of for each furnace's thermal afterburner temperature monitoring device to establish an operating parameter value or range for the required afterburner temperature of 1600 °F.~~

Said performance evaluations shall be conducted according to the requirements of **40 CFR 63, Section- 63.8 and Section C- Performance Testing, and shall be performed after issuance of this permit, with the test results submitted as part of the Notification of Compliance Status Report within 60 days as specified in Condition D.1.28(b).**

The tests shall be conducted utilizing the specified methods of Subpart RRR and/or alternative methods as approved by the Office of Air Quality.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

- ~~(2) The owner or operator must use these procedures to establish an operating parameter value or range for the afterburner operating temperature:~~

- ~~(i) Continuously measure and record the operating temperature of each afterburner every 15 minutes during the THC and D/F performance tests;~~
- ~~(ii) Determine and record the 15 minute block average temperatures for the three test runs; and~~
- ~~(iii) Determine and record the 3-hour block average temperature measurements for the 3 test runs.~~

(r) Labeling:

Placed in CD Condition D.1.11

In addition, ~~to document compliance with the requirements of this Condition,~~ the owner or operator of each scrap dryer/deacquering kiln/decoating kiln, group 1 furnace, group 2 furnace and in-line fluxer ~~must~~ **shall submit the information described in ~~Sec. 63.1515(b)(3)~~ Condition D.1.28(b)(3) as part of the notification of compliance status report ~~to document conformance with the operational standard in Sec. 63.1506(b).~~**

(s) Capture/Collection System:

In addition, ~~to document compliance with the requirements of this Condition,~~ the owner or operator of a new or existing affected source or emission unit with an add-on control device ~~must~~ **shall, for sweat furnaces AS-990 and AS-1000, submit the information described in ~~Sec. 63.1515(b)(2)~~ **Condition D.1.28(b)(2)** as part of the notification of compliance status report ~~to document conformance with the operational standard in Sec. 63.1506(c).~~**

Sec. 63.1513 Equations for Determining Compliance:

(b) PM, HCl, and D/F Emission Limits:

63.1513(b) doesn't apply because compliance is achieved by measuring the afterburner temperature and keeping records of the measurements.

(d) Conversion of Dioxin/Furan Measurements to TEQ Units:

63.1513(d) doesn't apply because compliance is achieved by measuring the afterburner temperature and keeping records of the measurements.

Sec. 63.1514 [Reserved]

Sec. 63.1515 Notifications:

The owner or operator shall submit the following notifications.

(a) Initial Notifications:

The owner or operator ~~must~~ **shall** submit initial notifications to the **Office of Air Quality** applicable permitting authority as **follows:** ~~described in paragraphs (a)(1) through (7) of this section.~~

- (1) As required by 63.9(b)(1), the owner or operator ~~must~~ **shall provide notification the Office of Air Quality of any existing minor area source that subsequently is modified such that it becomes** increases its emissions such that the source is a major source subject to Subpart RRR ~~the standard.~~

- (2) As required by 63.9(b)(3), the owner or operator **shall notify the Office of Air Quality of any new minor affected source, or reconstructed affected source, or source that has been reconstructed such that it becomes an affected source.** ~~that has an initial startup date after the effective date of this subpart and for which an application for approval is not required under 63.5(d), must provide notification~~ **Said notification shall include a statement that the source is subject to Subpart RRR the standard.**
- (3) As required by 63.9(b)(4), the owner or operator **shall, for any new major affected source or reconstructed major affected source, that has an initial startup date after the effective date of this subpart and for which an application for approval of construction or reconstruction is required by 63.5(d) must provide the following notifications:**
- (A) **notification of intention to construct a new major affected source, reconstruct a major source, or reconstruct a major source such that the source becomes a major affected source;**
 - (B) **notification of the date when construction or reconstruction was commenced, (submitted simultaneously with the application for approval of construction or reconstruction was commenced before the effective date of this subpart, or no later than 30 days after the date construction or reconstruction commenced after the effective date of this subpart);**
 - (C) **notification of the Anticipated date of startup; and**
 - (D) **notification of the Actual date of startup.**
- (4) As required by 63.9(b)(5), ~~after the effective date of this subpart,~~ any owner or operator who intends to construct a new affected source or reconstruct an affected source subject to this subpart, or reconstruct a source such that it becomes an affected source subject to this subpart, ~~must~~ **shall** provide notification of the intended construction or reconstruction. ~~The Said notification must shall include all the information required for an application for approval of construction or reconstruction, as required by 63.5(d).~~

For major sources, the application for approval of construction or reconstruction may be used to fulfill these requirements.

- (i) ~~The Said application must shall be submitted as soon as practicable before the construction or reconstruction is planned to commence. (but no sooner than the effective date) if the construction or reconstruction commences after the effective date of this subpart; or~~
 - (ii) ~~The application must be submitted as soon as practicable before startup, but no later than 90 days after the effective date of this subpart if the construction had commenced and initial startup had not occurred.~~
- (5) As required by 63.9(d), the owner or operator ~~must~~ **shall** provide notification of any special compliance obligations for a new source.

- (6) As required by 63.9(e) and (f), the owner or operator ~~must~~ **shall, if required,** provide notification **to the Office of Air Quality**, of the anticipated date for conducting performance tests and visible emission observations. ~~The owner or operator must~~ **Notification the Administrator** of the intent to conduct a performance test **shall be submitted** at least 60 days before the performance test is scheduled; ~~Notification of opacity or visible emission observations for a performance test must be provided at least 30 days before the observations are scheduled to take place.~~
- (7) As required by 63.9(g), the owner or operator ~~must~~ **shall** provide additional notifications for sources with continuous emission monitoring systems or continuous opacity monitoring systems.

(b) Notification of Compliance Status Report:

~~Each~~ The owner or operator ~~must~~ **shall** submit a notification of compliance status report **to the Office of Air Quality and US EPA, Region V of startup.** ~~within 60 days after the compliance dates specified in Sec. 63.1501. The~~ **Said notification must notification of compliance status report shall include the information specified in this Condition, and shall** be signed by the responsible official who ~~must~~ **shall** certify its accuracy.

~~A complete notification of compliance status report must include the information specified in paragraphs (a)(1) through (10) of this section. The required information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination. In a State with an approved operating permit program where delegation of authority under section 112(l) of the CAA has not been requested or approved, the owner or operator must provide duplicate notification to the applicable Regional Administrator. If an owner or operator submits the information specified in this section at different times or in different submittals, later submittals may refer to earlier submittals instead of duplicating and resubmitting the information previously submitted.~~

~~For the A complete~~ notification of compliance status report **to be deemed complete, the owner or operator shall submit, at a minimum, the following information** ~~must include:~~

- (1) ~~All~~ information required in Sec. 63.9(h). The owner or operator ~~must~~ **shall** provide a complete performance test report for each affected source and emission unit for which a performance test is required. A complete performance test report includes all data, associated measurements, and calculations (including visible emission and opacity tests).
- (2) ~~The~~ approved site-specific test plan and performance evaluation test results for each continuous monitoring system (including a continuous emission or opacity monitoring system).
- (3) ~~Unit~~ labeling as described in ~~Sec. 63.1506(b)~~ **Condition D.1.15**, including process type or furnace classification and operating requirements.
- (4) ~~The~~ compliant operating parameter value or range established for each affected source or emission unit with supporting documentation and a description of the procedure used to establish the value (e.g., lime injection rate, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature), including the operating cycle or time period used in the performance test.

- (5) ~~Design~~ design information and analysis, with supporting documentation, demonstrating conformance with the requirements for capture/collection systems in ~~Sec. 63.1506(e)~~ **Condition D.1.13.**
- (6) ~~If applicable, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in Sec. 63.1510(f).~~
- (7) ~~Manufacturer's specification or analysis documenting the design residence time of no less than 1 second for each afterburner used to control emissions from a scrap dryer/delacquering kiln/decoating kiln subject to alternative emission standards in Sec. 63.1505(e).~~
- (86) ~~Manufacturer's specification or analysis documenting the design residence time of no less than 2 seconds and design operating temperature of no less than 1600 °F for the each afterburners of sweat furnaces AS-990 and AS-1000 used to control emissions from a sweat furnace that is not subject to a performance test.~~
- (97) ~~Approved OM&M plan (including site-specific monitoring plan for each group 1 furnace with no add-on air pollution control device).~~
- (108) ~~S~~ startup, shutdown, and malfunction plan, with revisions.

Sec. 63.1516 Reports:

The owner or operator shall submit the following reports:

(a) Startup, Shutdown, and Malfunction Plan/Reports:

The owner or operator ~~must~~ **shall** develop and implement a written plan as described in Sec. 63.6(e)(3) that contains specific procedures to be followed for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the standard.

The owner or operator shall also keep records of each event as required by Sec. 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in Sec. 63.6(e)(3).

In addition to the information required in Sec. 63.6(e)(3), the plan ~~must~~ **shall** include:

- (1) ~~P~~ procedures to determine and record the cause of the malfunction and the time the malfunction began and ended; and
- (2) ~~C~~ corrective actions to be taken in the event of a malfunction of a process or control device, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

(b) Excess Emissions/Summary Report:

As required by Sec. 63.10(e)(3), the owner or operator ~~must~~ **shall** submit semiannual reports within 60 days after the end of each 6-month period. Each report ~~must~~ **shall** contain the information specified in Sec. 63.10(c). When no deviations of parameters have occurred, the owner or operator ~~must~~ **shall** submit a report stating that no excess emissions occurred during the reporting period.

- (1) A report ~~must~~ **shall** be submitted if any of these conditions occur during a 6-month reporting period:

- ~~(i) The corrective action specified in the OM&M plan for a bag leak detection system alarm was not initiated within 1 hour.~~
 - ~~(ii) The corrective action specified in the OM&M plan for a continuous opacity monitoring deviation was not initiated within 1 hour.~~
 - ~~(iii) The corrective action specified in the OM&M plan for visible emissions from an aluminum scrap shredder was not initiated within 1 hour.~~
 - (ivA) A an excursion of a compliant process or operating parameter value or range (e.g., lime injection rate or screw feeder setting, total reactive chlorine flux injection rate, afterburner operating temperature, fabric filter inlet temperature, definition of acceptable scrap, or other approved operating parameter).
 - (vB) A an action taken during a startup, shutdown, or malfunction was not consistent with the procedures in the plan as described in Sec. 63.6(e)(3).
 - (viC) An affected source (including an emission unit in a secondary aluminum processing unit) **any period of time when sweat furnace AS-990 or AS-1000** was not operated according to the requirements of this ~~s~~ **40 CFR 63, Subpart RRR.**
 - ~~(vii) A deviation from the 3-day, 24-hour rolling average emission limit for a secondary aluminum processing unit.~~
- (2) Each report must **shall** include ~~each of these certifications, as applicable:~~
- ~~(i) For each thermal chip dryer: ``Only unpainted aluminum chips were used as feedstock in any thermal chip dryer during this reporting period.''~~
 - ~~(ii) For each dross-only furnace: ``Only dross was used as the charge material in any dross-only furnace during this reporting period.''~~
 - ~~(iii) For each sidewell group 1 furnace with add-on air pollution control devices: ``Each furnace was operated such that the level of molten metal remained above the top of the passage between the sidewell and hearth during reactive fluxing, and reactive flux, except for cover flux, was added only to the sidewell or to a furnace hearth equipped with an add-on air pollution control device for PM, HCl, and D/F emissions during this reporting period.''~~
 - ~~(iv) For each group 1 melting/holding furnace without add-on air pollution control devices and using pollution prevention measures that processes only clean charge material: ``Each group 1 furnace without add-on air pollution control devices subject to emission limits in Sec. 63.1505(i)(2) processed only clean charge during this reporting period.''~~
 - (v) For each group 2 furnace: **a statement that ``Only clean charge materials were processed in sweat furnaces AS-990 and AS-1000" any group 2 furnace** during this reporting period, and no fluxing was performed or all fluxing performed was conducted using only nonreactive, non-HAP-containing/non-HAP-generating fluxing gases or agents, except for cover fluxes, during this reporting period."
 - ~~(vi) For each in-line fluxer using no reactive flux: ``Only nonreactive, non-HAP-containing, non-HAP-generating flux gases, agents, or materials were used at any time during this reporting period.''~~
- (3) The owner or operator ~~must~~ **shall** submit the results of any performance test conducted during the reporting period, including one complete report documenting test methods and procedures, process operation, and monitoring parameter ranges or values for each test method used for a particular type of emission point tested.

(c) Annual Compliance Certifications:

For the purpose of annual certifications of compliance required by 40 CFR Part 70 or 71, the owner or operator ~~must~~ **shall** certify continuing compliance based upon, but not limited to, the following conditions:

- (1) Any period of excess emissions, as defined in ~~paragraph (b)(1) of this section~~ **Condition**, that occurred during the year were reported as required by this **subpart**; and
- (2) All monitoring, recordkeeping, and reporting requirements were met during the year.

Sec. 63.1517 Records:

- (a) As required by Sec. 63.10(b), the owner or operator shall maintain files of all information (including all reports and notifications) required by the general provisions and ~~this Subpart RRR~~.
- (1) The owner or operator ~~must~~ **shall** retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records ~~must~~ **shall** be retained at the facility. The remaining 3 years of records may be retained off site.
- (2) The owner or operator may retain records on microfilm, computer disks, magnetic tape, or microfiche; and
- (3) The owner or operator may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

Should any general record keeping requirement(s) of this Condition conflict with any general record keeping requirements of Condition C.21, the owner or operator shall comply with the more stringent applicable requirement(s).

- (b) In addition to the general records required by Sec. 63.10(b), the owner or operator of a new or existing affected source (~~including an emission unit in a secondary aluminum processing unit~~) ~~must~~ **shall** maintain records of:
 - (1) ~~For each affected source and emission unit with emissions controlled by a fabric filter or a lime-injected fabric filter:~~
 - (i) ~~If a bag leak detection system is used, the number of total operating hours for the affected source or emission unit during each 6-month reporting period, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action(s) taken.~~
 - (ii) ~~If a continuous opacity monitoring system is used, records of opacity measurement data, including records where the average opacity of any 6-minute period exceeds 5 percent, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.~~
 - (iii) ~~If an aluminum scrap shredder is subject to visible emission observation requirements, records of all Method 9 observations, including records of any visible emissions during a 30-minute daily test, with a brief explanation of the cause of the emissions, the time the emissions occurred, the time corrective action was initiated and completed, and the corrective action taken.~~
 - (2) For **sweat furnace AS-990 and AS-1000** each affected source with emissions controlled by an afterburners:

- (A) Records of 15-minute block average afterburner operating temperature, including any period when the average temperature in any 3-hour block period falls below the compliant operating parameter value with a brief explanation of the cause of the excursion and the corrective action taken; and
 - (B) Records of annual afterburner inspections.
- ~~(3) For each scrap dryer/delacquering kiln/decoating kiln and group 1 furnace, subject to D/F and HCl emission standards with emissions controlled by a lime-injected fabric filter, records of 15-minute block average inlet temperatures for each lime-injected fabric filter, including any period when the 3-hour block average temperature exceeds the compliant operating parameter value +14 deg.C (+25 deg.F), with a brief explanation of the cause of the excursion and the corrective action taken.~~
- ~~(4) For each affected source and emission unit with emissions controlled by a lime-injected fabric filter:~~
- ~~(i) Records of inspections at least once every 8-hour period verifying that lime is present in the feeder hopper or silo and flowing, including any inspection where blockage is found, with a brief explanation of the cause of the blockage and the corrective action taken, and records of inspections at least once every 4-hour period for the subsequent 3 days. If flow monitors, pressure drop sensors or load cells are used to verify that lime is present in the hopper and flowing, records of all monitor or sensor output including any event where blockage was found, with a brief explanation of the cause of the blockage and the corrective action taken;~~
 - ~~(ii) If lime feeder setting is monitored, records of daily inspections of feeder setting, including records of any deviation of the feeder setting from the setting used in the performance test, with a brief explanation of the cause of the deviation and the corrective action taken;~~
 - ~~(iii) If lime addition rate for a noncontinuous lime injection system is monitored pursuant to the approved alternative monitoring requirements in Sec. 63.1510(v), records of the time and mass of each lime addition during each operating cycle or time period used in the performance test and calculations of the average lime addition rate (lb/ton of feed/charge);~~
- ~~(5) For each group 1 furnace (with or without add-on air pollution control devices) or in-line fluxer, records of 15-minute block average weights of gaseous or liquid reactive flux injection, total reactive flux injection rate and calculations (including records of the identity, composition, and weight of each addition of gaseous, liquid or solid reactive flux), including records of any period the rate exceeds the compliant operating parameter value and corrective action taken.~~
- ~~(62) For each continuous monitoring system, records required by Sec. 63.10(c).~~
- ~~(7) For each affected source and emission unit subject to an emission standard in kg/Mg (lb/ton) of feed/charge, records of feed/charge (or throughput) weights for each operating cycle or time period used in the performance test.~~
- ~~(8) Approved site-specific monitoring plan for a group 1 furnace without add-on air pollution control devices with records documenting conformance with the plan.~~
- ~~(9) Records of all charge materials for each thermal chip dryer, dross-only furnace, and group 1 melting/holding furnaces without air pollution control devices processing only clean charge.~~

- ~~(10) Operating logs for each group 1 sidewell furnace with add-on air pollution control devices documenting conformance with operating standards for maintaining the level of molten metal above the top of the passage between the sidewell and hearth during reactive flux injection and for adding reactive flux only to the sidewell or a furnace hearth equipped with a control device for PM, HCl, and D/F emissions.~~
- ~~(11) Operating logs for each in-line fluxer using no reactive flux materials documenting each flux gas, agent, or material used during each operating cycle.~~
- ~~(123) Records of all charge materials and fluxing materials or agents for a group 2 furnace sweat furnaces AS-990 and AS-1000.~~
- ~~(134) Records of monthly inspections for proper unit labeling for each affected source and emission unit subject to labeling requirements.~~
- ~~(145) Records of annual inspections of emission capture/collection and closed vent systems.~~
- ~~(156) Records for any approved alternative monitoring or test procedure.~~
- ~~(167) Current copy of all required plans, including any revisions, with records documenting conformance with the applicable plan, including:
 - (A) Startup, shutdown, and malfunction plan;
 - (B) For major sources, OM&M plan; and
 - (C) Site-specific secondary aluminum processing unit emission plan (if applicable).~~
- ~~(17) For each secondary aluminum processing unit, records of total charge weight, or if the owner or operator chooses to comply on the basis of aluminum production, total aluminum produced for each 24-hour period and calculations of 3-day, 24-hour rolling average emissions.~~

Sec. 63.1518 Applicability of General Provisions

The requirements of the general provisions in Subpart A of this part that are applicable to the owner or operator subject to the requirements of this Subpart are shown below:

- (a) 63.1: (a)(1)-(4), (a)(6)-(8), (a)(10)-(14), (b), (c)(1)-(2), (c)(4)-(5), (e)
- (b) 63.2: all
- (c) 63.3: all
- (d) 63.4: (a)(1)-(3), (a)(5), (b)-(c)
- (e) 63.5: (a), (b)(1), (b)(3)-(6), (d), (e), (f)
- (f) 63.6: (a), (b)(1)-(5), (b)(7), (c)(1)-(2), (c)(5), (e)((1)-(3), (f), (h), (i)(1)-(14), (i)(16), (j)
- (g) 63.7: (a)-(h)
- (h) 63.8: (a)(1)-(2), (a)(4), (b), (c)(1)-(8), (d), (e), (f)(6), (g)(1), (g)(3)-(5)
- (i) 63.9: (a)-(g), (h)(1)-(3), (h)(5)-(6), (i)-(j)
- (j) 63.10: (a)-(b), (c)(1), (c)(5 - 8), (c)(10 - 14), (d)(1 - 5), (e)(1 - 4), (f)
- (k) 63.12: (a)-(c)
- (l) 63.13: all
- (m) 63.14: all
- (n) 63.15: all

Sec. 63.1519 Delegation of Authority

Sec. 63.1520 [Reserved]

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

The source is not subject to the requirements of 326 IAC 2-6 because the source PTE of volatile organic compounds (VOC), oxides of nitrogen (NO_x), PM₁₀, Sulfur dioxide (SO₂), and carbon monoxide (CO), each are less than the applicable level of 100 tons/yr as specified in 326 IAC 2-6(b).

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

New Sweat Furnace (AS-990):

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from metal processing in the aluminum sweat furnace shall not exceed 4.76 pounds per hour when operating at a process weight rate of 1.25 tons of metal per hour.

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour (1.25 tons/hr)}$$

The thermal afterburner of sweat furnace AS-990 shall be in operation at all times the aluminum sweat furnace is in operation, in order to comply with this limit.

Existing Sweat Furnace (AS-1000):

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from metal processing in the aluminum sweat furnace shall not exceed 2.58 pounds per hour when operating at a process weight rate of 0.50 tons of metal per hour.

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour (0.50 tons/hr)}$$

The thermal afterburner of sweat furnace AS-1000 shall be in operation at all times the aluminum sweat furnace is in operation, in order to comply with this limit.

326 IAC 8-1-6 (New Facilities; General VOC Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a PTE VOC at 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. No facility at this source is regulated under any other provision of Article 8, nor does the proposed modification consist of any facility with a PTE VOC at 25 tons per year or more.

Thus, 326 IAC 8-1-6 does not apply.

326 IAC 9-1-2 (Carbon Monoxide Emission Limits)

This rule limits the carbon monoxide emissions from all stationary sources commencing operation after March 21, 1972. This rule includes sources of ferrous smelters and refuse incineration and burning equipment. The proposed aluminum sweat furnace is not a ferrous metal smelter, nor is the facility used for refuse incineration or burning.

Therefore, 326 IAC 9-1-2 does not apply.

326 IAC 11-5-1 (Fluoride Emission Limitations for Existing Primary Aluminum Plants)

Pursuant to 326 IAC 11-5-1 (Applicability), the requirements of this rule apply to primary aluminum plants in operation on or before January 26, 1976. The source is a secondary aluminum processing plant.

Therefore, 326 IAC 11-5-1 does not apply.

Testing Requirements

Pursuant to the construction permit stack testing guidance "Stack Testing Requirements in Construction Permits", issued on January 1, 1999, stack testing is required if:

- (a) any unit is subject to a NSPS or NESHAP standard,
- (b) any unit is subject to 326 IAC 6-1,
- (c) the unrestricted potential emissions of any unit are greater than 40 tons/yr,
- (d) the modification consists of any unit which utilizes an emission control device to satisfy a synthetic minor limit,
- (e) the modification consists of any units which use unapproved emission factors to estimate the emissions, and
- (f) any unit of the proposed modification is not in compliance with the applicable state and federal rules.

The sweat furnaces are subject to 40 CFR 63, Subpart RRR which requires the owner or operator to comply with a dioxin/furan emission limit of 3.5×10^{-10} gr/dscf TEQ at eleven percent (11%) oxygen (O_2). However, the NESHAP exempts the source from compliance stack tests provided the source installs afterburners at each furnace, operates each afterburner at 1600 °F, and achieve a required residence time of 2 seconds for each afterburner.

Heartland aluminum will install afterburners at each sweat furnace. The design residence time will be 2 seconds, and the afterburners will be operated at 1600 °F. Therefore, no stack tests for dioxin/furan emission shall be required.

The source unrestricted potential to emit of PM10 exceeds 100 tons/yr. In order to avoid Part 70 major source review until December 9, 2005, the source has opted to reduce the PM10 emissions to less than the part 70 levels through use of emission controls (the sweat furnace afterburners). Thus, PM10 stack testing shall be required for sweat furnace AS-990 and AS-1000 afterburners.

The source unrestricted potential to emit of particulate matter (PM) exceed 40 tons/yr. In addition, sweat furnaces AS-990 and AS-1000 are subject to respective 326 IAC 6-3-2 hourly limits of 2.60 and 4.76 lb/hr.

Since the unrestricted PM emissions are less than the only applicable major source threshold of 250 tons/yr, no PM testing is required to establish the annual emission rate. However, since the source unrestricted potential to emit is greater than 40 tons/yr, stack testing for PM shall be required to demonstrate compliance with the respective 326 IAC 6-3-2 limits.

Compliance Monitoring:

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Although the source Title V permit has not been issued, the source is considered subject to the Part 70 requirements under a permit shield. Thus, a determination has to be made as to whether or not compliance monitoring is required of the proposed modification.

State Compliance Monitoring Requirements:

Pursuant to the compliance monitoring guide "Title V Air Permit Compliance Monitoring Facts", issued on May 14, 1996, compliance monitoring is required if the proposed modification consists of units that emit particulate matter (PM), sulfur dioxide (SO_2), and/or volatile organic compounds (VOC), and if the modification consists of any unit that:

- (a) is subject to a NSPS or NESHAP standard, or
- (b) has a control device and the allowable emissions of the controlled pollutant exceeds 10 pounds per hour, or
- (c) does not utilize emission controls and has actual emissions exceeding 25 tons/yr, or
- (d) would have been subject to an applicable requirement but for conditions limiting its potential to emit.

The PM10 emissions of sweat furnaces AS-990 and AS-1000 are limited to less than the Part 70 thresholds allowing the source to defer submitting a Title V application to December 9, 2005 which is considered accepting a limit such that an applicable requirement becomes not applicable.

Thus, state compliance monitoring shall be required for both sweat furnaces (AS-990 and AS-1000). Compliance monitoring for sweat furnace AS-990 shall consist of performing daily visible emissions.

Federal Compliance Monitoring Requirements:

While 40 CFR 63, Subpart RRR does not have any applicable requirements for any of the state applicable pollutants (PM, SO₂, or VOC), the NESHAP does have compliance monitoring requirements associated with the afterburners used to comply with the dioxin/furan limit under Section 63.1505(f) of the rule.

Pursuant to 40 CFR 63, Subpart RRR, there are compliance monitoring requirements for the afterburners, the emissions capture/control systems, the afterburner temperature monitoring devices, and the miscellaneous requirements of placing informative labels at sweat furnaces AS-990 and AS-1000 and utilizing only clean charge and non-reactive fluxes.

The following is a list of the federal compliance monitoring requirements:

- (a) Afterburners: annual inspections of each afterburner.
- (b) Capture/Collection Systems: annual inspections of each capture/collection and closed vent system.
- (c) Monitoring Devices: continuous monitoring and recording of the afterburner temperature and inspection and calibration of each monitoring device every 6 months.
- (d) Labeling Requirements: monthly inspections of the labels.
- (e) Charge/Flux Requirements: recording the materials charged at each sweat furnace.

Conclusion

The operation of the proposed secondary metals reclamation operation shall be subject to the conditions of the attached proposed FESOP (069-14274-00060).